



-1-

SEQUENCE LISTING

<110> BERGERON, Michel G.
BOISSINOT, Maurice
HULETSKY, Ann
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OUELLETTE, Marc
PICARD, Francois J.
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<120> HIGHLY CONSERVED GENES AND THEIR USE TO GENERATE
SPECIES-SPECIFIC, GENUS-SPECIFIC AND UNIVERSAL NUCLEIC
ACID PROBES AND AMPLIFICATION PRIMERS TO RAPIDLY DETECT
AND IDENTIFY ALGA, ARCHAEL,...

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<170> PatentIn Ver. 2.1

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caactaccgt ccgcagttct acttccgtac acgggacgtg acgggctcga tcgagctgcc 720
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<210> 17
<211> 829
<212> DNA
<213> Cedecea davisae ATCC 33431

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<210> 18
<211> 824
<212> DNA
<213> Cedecea neteri ATCC 33855

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<400> 18

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<210> 19
 <211> 827
 <212> DNA
 <213> *Cedecea lapagei* ATCC 33432

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<210> 20
 <211> 831
 <212> DNA
 <213> *Chlamydia pneumoniae* strain CWL 029

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gagtcgtaac	tcttcctgaa	ggaactgaaa	tggtaatgcc	tgagagataac	gttgagcttg	780
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<210> 21
 <211> 826
 <212> DNA
 <213> *Chlamydia psittaci*

<400> 21

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<210> 22
 <211> 822
 <212> DNA
 <213> Chlamydia trachomatis strain LGV 12

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gtggtaactc	tgctgaggg	agttgagatg	gtcatgcctg	gggataacgt	tgagtgtgaa	780
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<210> 23
 <211> 835
 <212> DNA
 <213> Chryseobacterium meningosepticum strain CDC B7681

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<210> 24
 <211> 816
 <212> DNA
 <213> Citrobacter amalonaticus ATCC 25405

<400> 24

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tactccgttc	ttcaaaggct	accgtccgca	gttctacttc	cgtacaactg	acgtgactgg	720
caccatcgaa	ctgccggaag	gcgttgagat	ggtaatgccg	ggcgacaaca	tcaaaatggt	780
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<210> 25

<211> 825

<212> DNA

<213> *Citrobacter braakii* ATCC 43162

<400> 25

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<210> 26

<211> 830

<212> DNA

<213> *Citrobacter koseri* ATCC 27156

<400> 26

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<210> 27

<211> 827

<212> DNA

<213> *Citrobacter farmeri* ATCC 51112

<400> 27

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<210> 28
 <211> 797
 <212> DNA
 <213> *Citrobacter freundii* ATCC 8090

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<210> 29
 <211> 826
 <212> DNA
 <213> *Citrobacter sedlakii* ATCC 51115

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<210> 30
 <211> 823
 <212> DNA
 <213> *Citrobacter werkmanii* ATCC 51114

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<210> 31
 <211> 826
 <212> DNA
 <213> *Citrobacter youngae* ATCC 29935

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<210> 32
 <211> 841
 <212> DNA
 <213> *Clostridium perfringens* ATCC 13124

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<210> 33
 <211> 822
 <212> DNA
 <213> *Comamonas acidovorans* ATCC 15668

<400> 33
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tcgccacact ccgttcttca acaactaccg tccccagttc tatttccgta cgaccgacgt 720
gaccggctcc atcgagctgc ccgccgacaa ggaaatggtg atgcctggcg acaacgtgtc 780
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<210> 34
<211> 702
<212> DNA
<213> *Corynebacterium bovis* ATCC 7715

<400> 34
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ccggacgacc gacgtcaccg gcgtcgtcaa gctgcggag gg 702

<210> 35
<211> 689
<212> DNA
<213> *Corynebacterium cervicis* NCTC 10604

<400> 35
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ggaagaaggc ggtcgtcaca acccgttctt ctcgaactac cgtccgcagt tctacttccg 660
caccacggac gtgaccggcg tcatcacc 689

<210> 36
<211> 804
<212> DNA
<213> *Corynebacterium flavescens* ATCC 10340

<400> 36
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ggaaatcatc gagctcgttg agatggaaat ccgcgaactg ctcgctgagc aggactacga 180

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catcggcatc	aaggagaagt	ccatctccac	caccgttacc	ggtatcgaaa	tgttccgcaa	480
gatgatggac	tacaccgagg	ctggcgacaa	ctgtgggtctg	cttctgcgtg	gtaccaagcg	540
tgaagaggtc	gagcgcggcc	agggtgttat	caagccgggc	gcctacaccc	cccacaccaa	600
gttcgagggg	tccgtctacg	tcctcaagaa	ggaagagggc	ggccgccaca	ccccgttcat	660
ggacaactac	cgtcgcagtc	tctacttccg	taccactgac	gtgaccggcg	ttgttcacct	720
gcctgagggc	accgagatgg	tcatgcctgg	cgacaacggt	gatatgaccg	ttgagctcat	780
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<210> 37
 <211> 692
 <212> DNA
 <213> *Corynebacterium kutscheri* ATCC 15677

<400> 37						
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<210> 38
 <211> 797
 <212> DNA
 <213> *Corynebacterium minutissimum* ATCC 23348

<400> 38						
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catggacaac	taccgtccgc	agttctactt	ccgcaccacc	gacgtcaccg	gtgtcatcaa	720
gctgccggag	ggcaccgaga	tggatcatgcc	gggcgacaa	gttgagatgt	ccgtagagct	780
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<210> 39
 <211> 702
 <212> DNA
 <213> *Corynebacterium mycetoides* ATCC 21134

<400> 39						
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caaggacgag ggcgcccgcc acaccccggt cttcgacaac taccgtccgc agttctactt 660
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<210> 40

<211> 674

<212> DNA

<213> *Corynebacterium pseudogenitalium* ATCC 33038

<400> 40

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ttcatgaaca actaccgtcc gcagttctac ttccgtacca cggacgttac cgggtgttgtt 660
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<210> 41

<211> 694

<212> DNA

<213> *Corynebacterium renale* ATCC 19412

<400> 41

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ccaaggacga ggggtggccgc cacaccccat tcttcgacaa ctaccgtcca cagttctact 660
tccgcaccac cgacgtgacc ggcgttgtgc acct 694

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<210> 42

<211> 687

<212> DNA

<213> *Corynebacterium ulcerans* NCTC 8665

<400> 42

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687

<210> 43

<211> 778

<212> DNA

<213> *Corynebacterium urealyticum* ATCC 43042

<400> 43

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<210> 44

<211> 703

<212> DNA

<213> *Corynebacterium xerosis* ATCC 373

<400> 44

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<210> 45

<211> 832

<212> DNA

<213> *Coxiella burnetii* strain Nine Mile phase II

<400> 45

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acggggccagt	tattgagttt	accggagggg	atagagatgg	tgatgccggg	agataacgtg	780
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<210> 46
 <211> 816
 <212> DNA
 <213> Edwardsiella hoshinae ATCC 33379

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gttgatgacg aagagctgct ggaactgggt gagatggaag ttccgcgaact gctgtctcag 180
tacgatttcc cgggcgcacga tacgccggta atccgcgggt ctgcgctgaa agcgcctggaa 240
ggcgaagccg agtgggaagc gaagatcatc gaactggctg aaacgctgga ctccctacatt 300
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<210> 47
 <211> 821
 <212> DNA
 <213> Edwardsiella tarda ATCC 15947

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gttgatgacg aagagctgct ggaactgggt gagatggaag ttccgcgaact gctgtctcag 180
tacgacttcc cgggcgcacga cacgccggta atccgcgggt ctgcgctgaa agcgcctggaa 240
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<210> 48
 <211> 830
 <212> DNA
 <213> Eikenella corrodens ATCC 23834

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ggtagatgat gccagctgct ttgagttggt tgagatggaa atccgcgacc tgctctccag 180
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tgctgtagag ctggagcctg gtgtagaaat gggtatgcct ggtgagaacg taaccatcac 780
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<211> 808
<212> DNA
<213> *Enterobacter aerogenes* ATCC 13048

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gttgatgacg aagagctgct ggaactgggt gagatggaag ttcgtgaact gctgtctcag 180
tacgatttcc cgggcgacga cactccgatc gttcgtgggt ctgctctgaa agcgctggaa 240
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ccrgaaccag agcgtgcatg tgacaagccg ttcctgctgc cgatcgaaga cgtattctcc 360
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<210> 50
<211> 828
<212> DNA
<213> *Enterobacter agglomerans* ATCC 27989

<400> 50
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ggttgatgac gaagagctgc tggaactggg tgaatggaa gttcgtgaac ttctgtctca 180
gtacgatttc ccgggcgacg atactccgat cgttcgtggg tctgctctga aagcgctgga 240
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cccggaaacca gagcgtgcca ttgacaagcc gttcctgctg ccgatcgaag acgtattctc 360
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cgaagaagtt gaaatcgttg gtatcaaaga tacygcgaaa tcaacctgta ccggcgttga 480
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cactccgttc ttcaaaggct accgtccsca gttctacttc cgtacaactg acgtgactgg 720
caccatcgaa ctgccggaag gcgtagagat ggtaatgccg ggcgacaaca tcaaaatggg 780
tgttaccctg atccaccga tcgcgatgga cgacggtctg cgttcgca 828

<210> 51
<211> 825
<212> DNA
<213> *Enterobacter amnigenus* ATCC 33072

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cccggaaacca gaacgtgcta tcgataagcc attcctgctg ccaatcgaag acgtattctc 360
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caccatcgaa ctgccagaag gcgtagagat ggtaatgccg ggcgacaaca ttcagatggg 780
tgttaccctg atccacccaa tcgcgatgga tgacggtctg cgttt 825

<210> 52
<211> 822
<212> DNA
<213> *Enterobacter asburiae* ATCC 35953

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tactccgttc ttcaaaggct accgtccaca gttctacttc cgtacaactg acgtgaccgg 720
taccatcgaa ctgccagaag gcgttagagat ggtaatgcca ggcgacaaca tcaagatggt 780
tgtgactctg atccacccaa tcgcgatgga cgacggtctg cg 822

<210> 53
<211> 826
<212> DNA
<213> *Enterobacter cancerogenus* ATCC 35317

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cccagaacca gagcgtgcga ttgacaagcc attcctgctg ccaatcgaag acgtattctc 360
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taccatcgaa ctgccagaag gcgttagagat ggtaatgcca ggcgacaaca tcaagatggt 780
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<210> 54
<211> 806
<212> DNA
<213> *Enterobacter cloacae* ATCC 13047

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gttcttcaaa ggctaccgtc cacagttcta cttccgtaca actgacgtga ccggtaccat 720
cgaactgccg gaaggcgtag aggtggtaat gccaggcgac aacatcaaga tggttgtgac 780
tctgatccac ccaatcgcca tggacg 806

<210> 55
<211> 826
<212> DNA
<213> *Enterobacter gergoviae* ATCC 33028

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caccatcgaa ctgccggaag gcgtagagat ggtaatgccg ggcgacaaca tcaagatggg 780
tgttaccctg atccacccga tcgcgatgga cgacggtctg cgtttc 826

<210> 56
<211> 829
<212> DNA
<213> *Enterobacter hormaechei* ATCC 49162

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accatcgaa tgcagaaagg cgtagagatg gtaatgccag ggcgacaacat caagatgggt 780
gtgacgctga tccacccaat cgcgatggac gacggtctgc gtttcgcaa 829

<210> 57
<211> 831
<212> DNA
<213> *Enterobacter sakazakii* ATCC 29544

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accatcgaa tgcggaagg cgttagatg ttaactcccg ggcgacaacat caaatgggt 780
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<210> 58
 <211> 835
 <212> DNA
 <213> *Enterococcus casseliflavus* ATCC 25788

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 tcacacacca ttcttacta actaccgtcc tcagttctac ttccgtacaa ctgacgtaac 720
 tgggtgttgt gaattaccag aaggaactga aatggttatg cctggtgata acgtaacaat 780
 cgacgttgaa ttgatccacc caatcgctat cgaagacgga actcgtttct caatt 835

<210> 59
 <211> 826
 <212> DNA
 <213> *Enterococcus cecorum* ATCC 43198

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 catactccat tcttactaa ctaccgtcca caattctact tccgtacaac tgagttaca 720
 ggtgtagtta acttaccaga aggtactgaa atggttatgc ctggtgataa cgtaactatg 780
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<210> 60
 <211> 835
 <212> DNA
 <213> *Enterococcus dispar* ATCC 51266

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 ggttgatgac gaagaattat tagaattagt tgaaatggaa gttcgtgact tattgtcaga 180
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 cccaactcca gttcgtgata ctgacaaacc attcatgatg ccagtcgaag atgtattctc 360
 aatcactggt cgtggtactg ttgcaactgg tcgtgttgaa cgtggacaag ttcgcgttgg 420
 tgacgaagtt gaaatcgtag gtatcgctga agaaactgct aaaactactg taacaggtgt 480
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 cactccacat acaaaatttg cggcagaagt ttacgtttta actaaagaag aagggtggacg 660
 tcatactcca ttcttacta actaccgccc acaattctac ttccgtacaa ctgacgtaac 720
 aggtgttgtt gaattaccag aaggtactga aatggttatg cctggcgata acgttactat 780
 ggacgttgaa ttaatccacc caatcgcgat cgaagacggt actcgtttct caatc 835

<210> 61
 <211> 835
 <212> DNA
 <213> Enterococcus durans ATCC 19432

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<400> 61
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cctattatct cgtcaagttg gtgttcctta catcgtygta ttcttgaaca aagtagatat 120
ggtcgatgac gaagaattac tagaattagt tgaaatggaa gttcgtgact tattaacaga 180
atacgaattc cctggtgacg atgttcctgt aatcgctggt tcagctttga aagctttaga 240
aggcgcgct tcatacgaag aaaaaatcct tgaattaatg gctgcagttg acgaatatat 300
cccaactcca gaacgtgaca acgacaaaacc attcatgatg ccagttgaag atgtattctc 360
ratcactggt cgtggtactg ttgctacagg tcgtgttgaa cgtggacaag ttccgcgttg 420
tgacgttgta gatatcgttg gtatcgcaga agaaacagct caaacaacag ttactggtgt 480
tgaaatgttc cgtaaattat tagrctacgc tgaagctgga gacaacattg gtgctttact 540
acgtggtggt gcacgtgaag acatccaacg tggacaagtt ttagctaaac caggtacaat 600
cackcctcat acaaaattct ctgcagaagt atacgtgttg actaaagaag aagggtggacg 660
tcatactcca ttcttacta actaccgtcc acaattctac ttccgtacaa ctgacgtaac 720
aggtgttggt gaattaccag aaggaaactga aatggttatg cctggcgaca acgtaacaat 780
ggaagttgaa ttaatccacc caatcgctat cgaaaatggt actaaattct caatc 835
```

<210> 62
 <211> 680
 <212> DNA
 <213> Enterococcus faecalis strain R610

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<400> 62
agtagtttct gctgctgatg gtcctatgcc tcaaacacgt gaacatatct tattatcacg 60
taacgttggg gtaccatata tcgttgtatt cttaaacaata atggatatgg ttgatgacga 120
agaattatta gaattagtag aaatggaagt tcgtgactta ttatcagaat acgatttccc 180
aggcgatgat gttccagtta tcgcagggtc tgctttgaaa gctttagaag gcgacgagtc 240
ttatgaagaa aaaatccttag aattaatggc tgcagttgac gaatatatcc caactccaga 300
acgtgatact gacaaaccat tcatgatgcc agtcgaagac gtattctcaa tcaactggacg 360
tggtactggt gctacaggcc gtgttgaacg tgggtgaagt cgcgttgggt acgaagttga 420
aatcgttggg attaaagacg aaacatctaa aacaactggt acaggtgttg aaatgttccg 480
taaattatta gactacgctg aagcaggcga caacatcggt gctttattac gtggtgtagc 540
acgtgaagat atcgaacgtg gacaagtatt agctaaacca gctacaatca ctccacacac 600
aaaattcaaa gctgaagtat acgtattatc aaaagaagaa ggcggacgct acactccatt 660
cttcactaac taccgtcctc
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<210> 63
 <211> 680
 <212> DNA
 <213> Enterococcus faecalis strain R487

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<400> 63
agtagtttct gctgctgatg gtcctatgcc tcaaacacgt gaacatatct tattatcacg 60
taacgttggg gtaccatata tcgttgtatt cttaaacaata atggatatgg ttgatgacga 120
agaattatta gaattagtag aaatggaagt tcgtgactta ttatcagaat acgatttccc 180
aggcgatgat gttccagtta tcgcagggtc tgctttgaaa gctttagaag gcgacgagtc 240
ttatgaagaa aaaatccttag aattaatggc tgcagttgac gaatatatcc caactccaga 300
acgtgatact gacaaaccat tcatgatgcc agtcgaagac gtattctcaa tcaactggacg 360
tggtactggt gctacaggcc gtgttgaacg tgggtgaagt cgcgttgggt acgaagttga 420
aatcgttggg attaaagacg aaacatctaa aacaactggt acaggtgttg aaatgttccg 480
taaattatta gactacgctg aagcaggcga caacatcggt gctttattac gtggtgtagc 540
acgtgaagat atcgaacgtg gacaagtatt agctaaacca gctacaatca ctccacacac 600
aaaattcaaa gctgaagtat acgtattatc aaaagaagaa ggcggacgct acactccatt 660
cttcactaac taccgtcctc
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<210> 64
 <211> 685
 <212> DNA
 <213> Enterococcus faecium strain R482

<400> 64
agtagtttct gctgctgacg gcccaatgcc tcaaactcgt gaacacatcc tattgtctcg 60
tcaagttggt gttccttaca tcgttgtatt cttgaacaaa gtagacatgg ttgatgacga 120
agaattacta gaattagttg aaatggaagt tcgtgaccta ttaacagaat acgaattccc 180
tggtgacgat gttcctgtag ttgctggatc agctttgaaa gctctagaag gcgacgcttc 240
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acgtgacaac gacaaacatc tcatgatgcc agttgaagac gtgttctcaa ttactggacg 360
tggtactggt gctacaggtc gtgttgaacg tggacaagtt cgcgttggtg acgaagttga 420
agttgttggg attgctgaag aaacttcaaa aacaacagtt actggtggtg aaatgttccg 480
taaattgtta gactacgctg aagctggaga caacattggt gctttactac gtggtggtgc 540
acgtgaagac atccaacgtg gacaagtttt agctaaacca ggtacaatca cacctcatac 600
aaaattctct gcagaagtat acgtgttgac aaaagaagaa ggtggacgtc atactccatt 660
cttcactaac taccgtcttc aattt 685

<210> 65
<211> 825
<212> DNA
<213> *Enterococcus flavescens* ATCC 49996

<400> 65
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cttgttatca cgtaacgttg gtgtaccata catcgttggt ttcttaaaca aaatggatat 120
ggttgatgac gaagaattac tagaattagt tgaaatggaa gttcgtgact tattgtcaga 180
atatgacttc ccaggcgacg atgttcctgt aatcgcctggt tctgctttga aagctcttga 240
aggcgtatgct tcatacgaag aaaaaatcat ggaattaatg gctgcagttg acgaatacgt 300
tccaactcca gaacgtgaca ctgacaaacc attcatgatg ccagtcgaag acgtattctc 360
aatcactgga cgtggtactg ttgctacagg ccgtgttgaa cgtggacaag ttccgcgttg 420
tgacgaagtt gaaatcggtg gtattgctga agaaactgct aaaacaactg taactgggtg 480
tgaaatgttc cgtaaattgt tagactatgc tgaagcaggg gataacattg gtgcattgct 540
acgtgggggt gctcgtgaag acatccaacg tggacaagta ttagctaaag ctggtacaat 600
cacacctcat acaaaattta aagctgaagt ttacgtttta acaaaagaag aaggtggacg 660
tcacactcca ttcttacta actaccgtcc tcagttctac ttccgtacaa ctgacgtaac 720
tggtgttggt gaattaccag aaggaactga aatggttatg cctggtgata amgtaacaat 780
cgacgttgaa ttgatccacc caatcgctat cgaagacgga actcg 825

<210> 66
<211> 636
<212> DNA
<213> *Enterococcus gallinarum* strain R420

<400> 66
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cgttgttttc ttgaacaaaa tggatatggt tgatgacgaa gaattgctag aattagttga 120
aatggaagtt cgtgacctat tgtctgagta tgacttccca ggcgacgatg ttctgtaat 180
cgccggttct gctttgaaag ctcttgaagg agatccttca tacgaagaaa aaatcatgga 240
attgatggct gcagttgacg aatacgttcc aactccagaa cgtgatactg acaaaccatt 300
catgatgccg gtcgaagacg tattctcaat cactggacgt ggtactgttg ctacaggccg 360
tggtgaacgt ggacaagttc gcgttggtga tgaagtagaa atcgttggta ttgctgacga 420
aactgctaaa acaactgtaa caggtgttga aatgttccgt aaattgttag actatgctga 480
agcaggggat aacattgggt cattgctacg tggggttgct cgtgaagaca tccaacgtgg 540
acaagtattg gctaaagctg gtacaatcac acctacata aaattcaaag ctgaagtta 600
tgttttgaca aaagaagaag gtggacgtca cactcc 636

<210> 67
<211> 835
<212> DNA
<213> *Enterococcus hirae* ATCC 8043

<400> 67
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cctaytatct cgtcaagttg gtgttccata catcgttgta ttcttgaaca aagtagatat 120
ggttgacgac gaagaattac tagaattagt tgaaatggaa gttcgtgact tattaacaga 180
atacgaattc cctggtgacg atgttcctgt agttgctggg ycagctttga aagctttaga 240

aggcgacgct	tcatacgaag	aaaaaatcct	tgaattgatg	gctgcagttg	acgaatatat	300
cccaactcca	gaacgtgaca	acgacaaacc	attcatgatg	ccagtcgaag	acgtattctc	360
aatcactggg	cgtggtagtg	ttgctacagg	tcgtgttgaa	cgtggacaag	ttcgcggttg	420
tgacgttgta	gatatcgttg	gtatcgcaga	agaaacagct	caaacaacag	ttactgggtg	480
tgaaatgttc	cgtaaattat	tagactacgc	tgaagctgga	gacaacattg	gtgctttact	540
acgtgggtgt	gcacgtgaag	acatccaacg	tggacaagtt	ttagctaaac	caggtacaat	600
cacacctcat	acaaaattct	ctgcagaagt	atacgtgttg	acaaaagaag	aaggtggacg	660
tcatactcca	ttcttccacta	actaccgtcc	acaattctac	ttccgtacra	ctgacgtaac	720
aggtgttggt	gaattaccag	aaggaaactga	aatgggttatg	cctggcgaca	acgtaacaat	780
ggaagttgaa	ttaatccacc	caatcgctat	cgaaaacggg	actaaattct	caatc	835

<210> 68
 <211> 835
 <212> DNA
 <213> *Enterococcus mundtii* ATCC 43186

<400> 68						
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cccaactcca	gaacgtgata	acgacaaacc	attcatgatg	ccagttgagg	acgtattctc	360
aatcactggg	cgtggtagtg	ttgctacagg	acgtgttgaa	cgtggacaag	ytctgtgttg	420
tgacgttatc	gatatcgttg	gtatcgcaga	agaaacagct	caaacaactg	taactgggtg	480
tgaaatgttc	cgtaaattat	tagactacgc	tgaagcaggc	gataacattg	gtgcgttact	540
acgtgggtgt	tcacgtgaag	acatccaacg	tgggtcaagt	ttagctaaac	caggtacaat	600
cacacctcat	acaaaattct	ctgcagaagt	atacgtgttg	actaaagaag	aaggtggacg	660
tcatactcca	ttcttccacta	actaccgtcc	acaattctac	ttcygtacga	ctgacgtaac	720
trgtgttgty	gaattaccag	aaggaaactga	aatgggttatg	cctggcgaca	acgtaacaat	780
ggaagttgaa	ttaatccacc	caatcgctat	cgaaaatggg	actaaattct	caatc	835

<210> 69
 <211> 836
 <212> DNA
 <213> *Enterococcus pseudoavium* ATCC 49372

<400> 69						
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ggttgatgac	gaagaattac	tagaattagt	tgaatggaa	gttcgtgact	tattgtcaga	180
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aggcgaccct	tcatacraag	aaaaaatctt	agaattaatg	stgctgttg	acgaatacat	300
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aatcactggg	cgtggtagtg	ttgcaactgg	tcgtgttgaa	cgtggacaag	ttcgcggttg	420
tgacgaagtt	gaaatcgtag	gtatcgctga	agaaactgct	aaaacaactg	ttacaggtgt	480
tgaaatgttc	cgtaaatgtg	tagactacgc	tgaagcaggc	gataacatcg	gtgcattatt	540
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cactccacat	acaaaattct	ctgcagaagt	ttacgtttta	actaaagaag	aaggcgggcg	660
tcacactccg	ttcttccacta	actaccgtcc	tcagttctac	ttccgtacaa	ctgacgtaac	720
tggtgttggt	gatctaccag	aaggtactga	aatggtaatg	cctggtgata	acgtaactat	780
ggaagttgaa	ttaatccacc	caatcgcgat	cgaagacgga	actcgtttct	ctattc	836

<210> 70
 <211> 835
 <212> DNA
 <213> *Enterococcus raffinosus* ATCC 49427

<400> 70						
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cttggtatct	cgtaacgttg	gtgttcctta	catcgttgta	ttcttaaaca	aaatggatat	120
ggttgacgat	gaagaattac	tagaattagt	tgaatggaa	gttcgtgact	tattaactga	180
atacgacttc	ccaggcgacg	acactccagt	tatcgcgagg	tcagctttga	aagccttaga	240

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aggcgacgct tcatacgaag aaaaaatctt agaattaatg gctgctgttg atgaatacat 300
cccaacacca gttcgtgata ctgacaaacc attcatgatg ccagyggag acgtaytctc 360
aatcactggt cgtggaactg ttgcaactgg tcgtgttgaa cgtggacaag ttcgcgttgg 420
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tgaaatgttc cgtaaattgt tggattacgc tgaagcgggc gacaacattg gtgcattatt 540
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tcatactcca ttcttacta actaccgtcc tcagttctac ttccgtacaa ctgacgtaac 720
tggtgtagtt gatctaccag aaggctactga aatggtaatg cctggtgata acgtaactat 780
ggaagttgaa ttaatccacc caatcgcgat cgaagacgga actcgtttct ctatt 835

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<210> 71
 <211> 835
 <212> DNA
 <213> *Enterococcus saccharolyticus* ATCC 43076

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<400> 71
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cccaactcca gaacgtgata ctgaaaaacc attcatgatg ccagttgagg atgtattctc 360
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tgaaatgttc cgtaaattat tagactacgc tgaagcaggc gataacatcg gtgctttatt 540
acgtggggtt gctcgtgaag acatccaacg tggacaagta ttagctaaac caggaacaat 600
cactcctcat acaaaattcg tagctgaagt ttacgtttta actaaagaag aagggtggacg 660
tcatactcca ttcttacta actaccgtcc tcaattctac ttccgtacaa ctgacgtaac 720
tggtgttgta gaattacgag aaggctactga aatggtaatg cctggtgaca acgtaactat 780
cgacgttgaa ttaatccacc caatcgctat cgaagacgga actcgtttct ctatt 835

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<210> 72
 <211> 823
 <212> DNA
 <213> *Enterococcus solitarius* ATCC 49428

```

<400> 72
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ttgatgacga agaattactt gagtttagtt aaatggaagt acgtgatcta ttatctgaat 180
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caactcctga acgtgaccat gacaaacat tcatgatgcc aattgaagat gtattttcaa 360
ttacaggccg tggtagtgtt gctacaggac gtgttgaaac cgggactatc aaagtcggcg 420
atgaagttga cattattggt attcatgaag acgttaaaaa gacaacagtt actggtgtag 480
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gtggtgtttc tcgtgatgat atcgaacgtg gtcaagtatt agctaaacca ggttcaatca 600
caccacatac aagattctct gctgaagttt atgttttgac taaagaagaa ggcggacgtc 660
atactccatt cttctcaaac tatcgtcttc aattctactt ccgtacaact gatatcactg 720
gtgtcattga attgccagaa ggtactgaaa tggtaatgcc aggtgataat gtaacaatgg 780
atgttgaatt aatccaccca gtcgctatcg aagaaggaa tcg 823

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<210> 73
 <211> 835
 <212> DNA
 <213> *Enterococcus casseliflavus* ATCC 25788

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<400> 73
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tgtcgatgat gacgagttga tcgatttagt tgaaatggaa gtcagagaa tgctgactga 180
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ccatacccca ttctttaata attatcgccc acaattttac ttccgtacaa cggacgtaac 720
tggggaatatc gttttaccag aaggaacgga aatgggtgatg cctgggtgaca acgtaacgat 780
cgatgtggaa ttgatccatc cgatcgctgt agaaaatgga acgaccttct cgatt 835

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<210> 74

<211> 380

<212> DNA

<213> *Staphylococcus saprophyticus* ATCC 15305

<400> 74

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aacttaacca gaatcggttaa aactatatga agattctggt tttttaaat caaaaagttt 180
tctaaaaaat ttacttgctt ttttaagtat aggtataaaa tacgattgat taaaacagta 240
aaggaaatga atcatgaaac aattaactaa gcctttatac ttttacctat tactttttat 300
tacaacaacg ctgattggcg cgttactatt atatttgcca atcacaggta aacatcctat 360
tgattttgtg gacgcccggt

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<210> 75

<211> 666

<212> DNA

<213> *Enterococcus flavescens* ATCC 49996

<400> 75

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gatgatgacg agttgatcga tttagttgaa atggaaagtc gagaattgct gactgaatat 180
gattttcctg gcgacgacat tcctgtgatc aagggtctcg cgttaaaagc cttggaaggg 240
gaccagatg ctgaagcagc gatcttaacg ctgatggata cggtagatga atatatccca 300
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ccgcatacga aattccaagc ggaagtctat gtgttgacaa aagaagaagg cggtcgccat 660
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<210> 76

<211> 751

<212> DNA

<213> *Enterococcus gallinarum* ATCC 49573

<400> 76

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cgaaatgttc cgcaagacga tggacttttg ggaagccggg gacaatgtag gtgtcttgct 540
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cacaccacat acaaaattcc aagcagaagt ttatgtattg acgaaagaag aaggtggtcg 660
tcatacacca ttcttcaaca actatcgccc acaattttat ttccgtacaa cggatgtgac 720
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<210> 77
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 <212> DNA
 <213> *Ehrlichia canis* strain Florida

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 atatgggtat cctgggggatg atatatagatg agttagagga tctgcagtta aagcattaga 240
 agaagaaaca ggctcaggtg tgtggagtga aaaaataatg gaattgatga atgctttaga 300
 aaaaataagt ttaccagtaa gagaaaaaga taagccattt ttaatgtcaa tagaagatgt 360
 gttttcaata cctggaagag gtacagtagt aacaggaaga atagaaagag gagtaattag 420
 agtaggggat aaaatagaga tagtaggatt gcgtgagata caaagtacag tatgtacagg 480
 tgttgaaatg tttcataaag cattagatgc aggagaagca ggggataatg ctggaatatt 540
 gttaagaggg ataaaaaaag aagatgtaga aagagggcaa gtattgagtg cacctggaca 600
 gatacattca tataagagat ttaaggcaga ggtatatata ttgaaaaaag aagaaggagg 660
 aagacatact ccatttttct caaattacca gccgcaattt tatgttagaa caacagatgt 720
 aacagggaat ataaagttac cagaaggagt agaaatggta atgccagggg ataataataa 780
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 <211> 817
 <212> DNA
 <213> *Escherichia coli* ATCC 23511

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 gtacgacttc ccggcgacg acactccgat cgttcgtggt tctgctctga aagcgtgga 240
 aggcgacgca gagtgggaag cgaaaatcct ggaactggct ggcttccctg attcttayat 300
 tccggaacca gagcgtgcga ttgacaagcc gttcctgctg ccgacgaag acgtattctc 360
 catctccggt cgtgggtaccg ttgttaccgg tcgtgtagaa cgcggtatca tcaaagttgg 420
 tgaagaagtt gaaatcgttg gtatcaaaga gactcagaag tctacctgta ctggcgttga 480
 aatgttccgc aaactgctgg acgaaggccg tgctgggtgag aacgtagggtg ttctgctgcg 540
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 tactccgttc ttcaaaggct accgtccgca gttctacttc cgtactactg acgtgactgg 720
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<210> 79
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 <212> DNA
 <213> *Escherichia fergusonii* ATCC 35469

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 aaccagagcg tgcgattgac aagccgttcc tgctgccgat cgaagacgtg ttctccatct 360
 ccggtcgtgg taccgttgtt accggtcgtg tagaacgcgg tatcatcaaa gttgggtgaag 420
 aagttgaaat cgttggatc aaagagactc agaagtctac ctgtactggc gttgaaatgt 480
 tccgcaaaact gctggacgaa ggccgtgctg gtgagaacgt aggtgttctg ctgctgggta 540
 tcaaactgta agaaatcgaa cgtgggtcagg tactggctaa gccgggcacc atcaagccgc 600
 acaccaagtt cgaatctgaa gtgtacattc tgtccaaaga tgaaggcggc cgtcactatc 660
 cgttcttcaa aggtaccgt ccgcagttct acttccgtac tactgacgtg actggtacca 720
 tcgaactgcc ggaaggcgta gagatggtaa tgccgggcga caacatcaaa atgggttgta 780
 ccctgatcca cccgatcgcg atggacgacg gtctgcgttt cgcaa 825

<210> 80
 <211> 829
 <212> DNA
 <213> Escherichia hermannii ATCC 33650

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gttgatgacg aagagctgct ggaactgggt gagatggaag ttccggaact gctgtcccag 180
tacgatttcc cgggcgacga caccgccgat gttcgtgggt ccgcgctgaa agcgctggaa 240
ggcgaagcag agtgggaaga gaaaatcatc gaactggctg gctacctgga ttcctatata 300
ccggaaccag agcgtgcatg tgacaagccg ttctgctgc ctatcgaaga cgtattctcc 360
atctccggcc gtggtaccgt tgttaccggt cgtgtagagc gcggtatcat caaagtgggt 420
gaagaagttg aaatcgtggg tatcaaagat actgcgaaat caacctgtac cggcgttgaa 480
atgttccgca aactgctgga cgaaggccgt gcgggcgaga acgtgggtgt tctgctgcgt 540
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cckcacacca agttcgaatc tgaagtgtac attctgtcca aagacgaagg cggccgtcac 660
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accatcgaac tgccggaagg cgttgagatg gtaatgccgg gcgacaacat caaaatgggt 780
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 <212> DNA
 <213> Escherichia vulneris ATCC 33821

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ggttgatgac gaagagctgc tggaactggg tgagatgga tgctgtgaac ttctgtcca 180
gtacgacttc cggggcgacg acacccgat cattcgtgggt tctgcgctga aagcgctgga 240
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cccggaacca gagcgtgcga ttgacaagcc gttcctgctg ccgatcgaag acgtattctc 360
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aatgttccgc aaactgctgg acgaaggctc tgcaggcgag aactgcggcg ttctgctgcg 540
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gccgcacacc aagttcgaat ccgaagtgt catcctgtcc aaagacgaag gcggccgtca 660
cactccgttc ttcaaaggct accgtccgca gttctacttc cgtacaactg acgtgactgg 720
caccatcgaa ctgccggaag gcgtagagat ggtaatgccg ggcgacaaca tcaaaatgggt 780
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<210> 82
 <211> 828
 <212> DNA
 <213> Eubacterium lentum ATCC 43055

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gacccgctgg agatcgtcgg tatcaaggag acccagaaca cggctctgcac cggtatcgag 480
atgttccgca agctgctcga cgaggctcag gccggcgaca acatcggtg cctgctccgc 540
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gttgcccacc ttcccagggg caccgagatg gtcatgccgg gcgacaacgt ggagatcaag 780
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<210> 83
<211> 835
<212> DNA
<213> *Eubacterium nodatum* ATCC 33099

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tatgaattcc cgggagatga taccgccgata gtaagagggt cagccctgaa ggcactggaa 240
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ggtgatgaag tagaaatcgt gggaatgagc gaagagagaa gaaaggtagt agtaacggga 480
gttgaaatgt tcagaaagct tctggatgaa gcagagacag gagacaacat cggagcactg 540
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aggcatacgc cgttcttcaa yggatacagw ccacagttct acttcagaac aacagacgta 720
acaggagatt tgcagctgcc ggaaggarga gagatgtgca tgccgggaga taatgtggta 780
atgaacrtca gcctgatcac tccgattgct atagaagagg gwctgagatt tgcca 835

<210> 84
<211> 826
<212> DNA
<213> *Ewingella americana* ATCC 33852

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gatgacgaag agctgctgga actggtagaa atggaagttc gygaacttct gtctgcttac 180
gatttcccag gcgacgacat cccagttggt aaagggttcag cgctgaaagc actggaaggc 240
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ccgttcttca aaggctaccg tccacagttc tacttccgta caactgacgt gaccggtagc 720
atcgaaactgc cagaaggcgt agagatggta atgccagggt acaacatcaa catgrtagtt 780
accctgatcc acccaatcgc gatggatgac ggtctgcgtt tcgcaa 826

<210> 85
<211> 828
<212> DNA
<213> *Francisella tularensis* strain LVS

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tgatgaagtt gaagttgttg gtattcgtcc aactcaaaaa actacagtaa ctgggtgtgga 480
aatgttccgt aagcttttag atagagggga agctgggtgat aacgttggtg tcctagttcg 540
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gccacatact aagtttgaag ctgaggttta tgtattatct aaagaagagg gtggtagaca 660
tactccattc ttcaagggat atagaccaca attctacttc cgtactacag acattactgg 720
agctgttgag cttccagagg gtgtagaaat ggttatgcct ggtgataacg ttaagatgac 780
tatcactcta attaacccaa tcgctaggat gaagggttac gttttgca 828

<210> 86
 <211> 829
 <212> DNA
 <213> *Fusobacterium nucleatum* subsp. *polymorphum* ATCC 10953

<220>
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 <222> (274)..(274)
 <223> n represents any nucleotide

<400> 86
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 ggtagacgac gctgaaatgy tggaaactcg tgaatggaa atgcgtgaac tgctttcagc 180
 ytacgaattc gayggygaca acactccktt cattcagggt tctgctcttg gtgcrttgaa 240
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 aatcactggt cgtggtactg tagctactgg tctgctcgaa gctggtgtta tccatgtagg 420
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 aatgttccgc aagttgctgg atcaagggtga agctggtgac aacgtaggty tgttgcctcg 540
 tggatcgcag aagaacgaaa tcaaactgta tatggttctt tgtaagcccg gtcagattaa 600
 acctcactct aagttcaaag cttctatcta cgttttgaag aaagaagaag gtggtcgtca 660
 cactccgttc cacaacaaat accgtcctca gttctatctg cgtactatgg actgtacagg 720
 tgaaatcwct cttccggaag gaactgaaat ggtaatgcct ggtgataacg tagaaatcac 780
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<210> 87
 <211> 828
 <212> DNA
 <213> *Gemella haemolysans* ATCC 10379

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 gtgttgctcg tgaagacatc gaacgtggac aagtttttagc agtccctaaa acaatcactc 600
 cacacactca attcgtagct gacgtgtacg tattatctaa agaagaagggt ggacgtcaca 660
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 tagttacttt actgaagggt actgaaatgg taatgcctgg ggataacgta tcaatcaacg 780
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<210> 88
 <211> 823
 <212> DNA
 <213> *Gemella morbillorum* ATCC 27824

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 atactcaatt cgtagctgat gtgtacgtat tatctaaaga agaagggtgga cgtcacactc 660

cattcttcac	aaactaccgt	ccacaattct	acttccgtac	tactgacgta	actggtgtag	720
ttactttacc	agaagggtact	gaaatggtaa	tgcctgggga	caacgtatca	atcaacgtag	780
aacttatttc	tccaatcgct	atcgaagaag	gaactcgttt	ctc		823

<210> 89
 <211> 829
 <212> DNA
 <213> Haemophilus actinomycetemcomitans ATCC 33384

<400> 89						
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gatgacgaag	agttattaga	attagttgaa	atggaagttc	gtgaacttct	ttctcaatat	180
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ccattcttca	aaggttaccg	tcacaaattc	tatttccgta	caactgacgt	aaccggtact	720
atcgagttac	ctgaaggcgt	ggaaatgggt	atgcctggcg	ataacatcaa	aatgaccgta	780
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<210> 90
 <211> 833
 <212> DNA
 <213> Haemophilus aphrophilus ATCC 33389

<400> 90						
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<210> 91
 <211> 815
 <212> DNA
 <213> Haemophilus ducreyi DSM 8925

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<213> *Haemophilus parahaemolyticus* ATCC 10014

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<212> DNA
<213> *Haemophilus parainfluenzae* ATCC 7901

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 <213> *Haemophilus paraphrophilus* ATCC 29241

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 <213> *Haemophilus segnis* ATCC 33393

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 <212> DNA
 <213> *Hafnia alvei* ATCC 13337

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<211> 828
<212> DNA
<213> *Kingella kingae* ATCC 23330

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749

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<212> DNA
<213> *Klebsiella planticola* ATCC 33531

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<213> *Klebsiella pneumoniae* subsp. *ozaenae* ATCC 11296

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<211> 743
<212> DNA
<213> *Klebsiella pneumoniae* subsp. *pneumoniae* ATCC 13883

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<210> 104
 <211> 819
 <212> DNA
 <213> *Klebsiella pneumoniae* subsp. *rhinoscleromatis* ATCC 13884

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<210> 105
 <211> 832
 <212> DNA
 <213> *Kluyvera ascorbata* ATCC 33433

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<210> 106
 <211> 830
 <212> DNA
 <213> *Kluyvera cryocrescens* ATCC 33435

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 gggtgatgac gaagagctgc tggaactggg tgaaatggaa gttcgtgaac ttctgtctca 180
 gtacgatttc ccaggcgacg acactcctat cgttcgtggg tccgcgctga aagcgcctga 240
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 ccagaaacca gagcgtgcga ttgataagcc gttcctgctg ccaatcgaag acgtattctc 360
 catctccggt cgtggtagcg ttgttaccgg tcgtgtagag cgcggtatca tcaaagtgtg 420
 tgaagaagt gaaatcggtg gtatcaaaga cactgctaag tctacctgta ccggcggtga 480
 aatgttccgc aaactgctgg acgaaggccg tgctggtagg aacgttgggt ttctgctgcg 540
 ttgtatcaaa cgtgaagaaa tcgaacgtgg tcaggttctg gctaagccag gctccatcaa 600
 gccgcacacc aaattcgaat ctgaagttta catcctgtcc aaagacgaag gcggccgtca 660
 tactccgttc ttcaaaggct accgtccaca gttctacttc cgtactactg acgtgactgg 720
 taccatcgaa ctgccagaag gcgtagagat ggtaatgccg ggcgacaaca tcaaaatggt 780
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<210> 107
 <211> 826
 <212> DNA
 <213> *Kluyvera georgiana* ATCC 51603

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tgatgacgaa gagctgctgg aactgggtga aatggaagtt cgtgaacttc tgtctcagta 180
cgacttcccc ggcgacgaca cgccgatcgt tcgtggttct gctctgaaag cgctggaagg 240
cgacgctgag tgggaagcga aaatcatcga actggcgggc ttcttggtt cttacatccc 300
ggaaccagag cgtgcgattg acaagccgtt cctgctgccg atcgaagacg tattctccat 360
ctccggtcgt ggtaccgttg ttaccggctc tgtagaacgc ggtatcatca aagttggcga 420
agaagttgaa atcgttggtg tcaaagacac cgctaagtct acctgtactg gcgttgaaat 480
gttccgcaaa ctgctggacg aaggccgtgc tggtgagaac gttggtgttc tgctgcgtgg 540
tatcaaactg gaagaaatcg aacgtgggtc ggtactggct aagccgggtt ctatcaagcc 600
gcacaccaag ttcgaatctg aagtgtacat tctgtccaaa gacgaaggcg gccgtcatac 660
tccgttcttc aaaggctacc gtccgcagtt ctacttccgt actactgacg tgactggcac 720
catcgaactg ccggaaggcg ttgagatggg aatgccgggc gacaacatca aaatggttgt 780
taccctgatc caccgatcgc cgaaggacga aggtctgcgt ttcgca 826
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<210> 108
 <211> 803
 <212> DNA
 <213> *Lactobacillus casei* subsp. *casei* ATCC 393

<220>
 <221> misc_feature
 <222> (768)..(768)
 <223> n represents any nucleotide

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<400> 108
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gaattagttg aaatggaaat tcgtgatcta ttaactgaat atgaattccc tggcgatgac 180
attcctgtaa tcaaagggtc agctcttaaa gcacttcaag gtgaagctga ctgggaagct 240
aaaattgacg agttaatgga agctgtagat tcttacattc caactccaga acgtgatact 300
gacaaaccat tcatgatgcc agttgaggat gtattctcaa tcaactggctg tggaaacagtt 360
gcaactggac gtgttgaacg tggacaagtt aaagtgggtg acgaagtaga agttatcggt 420
attgaagaag agagcaaaaa agtagtagta actggagtag aaatgttccg taaatyacta 480
gattacgctg aagctggcga caacattggc gcacttctac gtgggtgttg tcgtgaagat 540
atccaacgtg gtcaagtatt agctaaacca gggtcgatta ctccacacac taacttcaaa 600
gctgaaactt atgttttaac taaagaagaa ggtggacgtc acactccatt cttcaacaa 660
taccgcccac aattctattt ccgtactact gacgttaact gtattgttac acttcagaa 720
ggtactgaaa tggtaatgcc tgggtgataac attgagcttg cagttganct aattgcacca 780
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<210> 109
 <211> 825
 <212> DNA
 <213> *Lactococcus lactis* subsp. *lactis* ATCC 19435

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tggtgatgat gaagaattga tggaaactcgt tgaatggaa gttcgtgacc tcttgagcga 180
atacgacttc ccagggtgacg atattcctgt aatcgctggg tcagcacttg gtgctttgaa 240
cgggtgaacca caatgggttg cttaaagttga agaattgatg gacatcgttg atgaatacat 300
cccaactcca gaacgcgaca ctgacaaacc actccttctt ccagtcgaag acgtattctc 360
tatcactggg cgtgggtacag ttgcttcagg acgtatcgaa cgtgggtactg ttaaagttgg 420
tgacgaagtt gaaactcgtt gtatcaaaga agaaactaaa aaagctgttg ttactggtat 480
cgaaatgttc cgtaaaacac ttactgaagg tcttgctggg gataacgtcg gtgcacttct 540
ccgtgggtatc caacgtgacg aaatcgaacg tgggtcaagtt attgctaaac caggttcaat 600
cactccacac aaacttttcg aagggtgaagt ttacgtattg agcaaagaag aaggcggacg 660
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tcacactcca	ttcttcgaca	actaccgtcc	tcaattctac	ttccacacaa	ctgacgttac	720
tggttcagtt	aaacttccag	aaggaaactga	aatggtaatg	cctgggtgaca	acgtgcatat	780
cgacgttgaa	ttgatccacc	cagttgcat	cgaacaaggt	actac		825

<210> 110
 <211> 824
 <212> DNA
 <213> *Leclercia adecarboxylata* ATCC 23216

<400> 110						
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ctgctgggtc	gtcaggtagg	cgttcccttc	atcatcgtgt	tcctgaacaa	atgcgacatg	120
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tacgacttcc	cgggcgacga	caccccaatc	gttcgtgggt	ctgcgctgaa	agcgctggaa	240
ggcgaagcag	agtgggaaga	gaaaatcatc	garctggctg	gctacctgga	ttcctacatc	300
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atctccggtc	gtggtaccgt	tgttaccggt	cgtgtagagc	gcggtatcat	caargttggc	420
gaagaagtgt	aaatcgttgg	tatcaaggac	actgctaagt	ctacctgtac	cggcgttgaa	480
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ggtatcaaac	gtgaagaaat	cgaacgtggg	caggttcttg	ctaagccagg	ctcyatcaag	600
ccgcacacca	agttcgaatc	tgaagtgtac	atcctgtcya	aagacgaagg	cggccgtcat	660
actccgttct	tcaaaggcta	ccgtccacag	ttctacttcc	gtackactga	cgtgaccggt	720
accatcgarc	tgccagaagg	cgttgagatg	gtaatgccag	gcgacaacat	caaaatgggt	780
gttaccctga	tccaccaat	cgcaatggac	gatgggtctgc	gttc		824

<210> 111
 <211> 838
 <212> DNA
 <213> *Legionella micdadei* ATCC 33218

<400> 111						
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actyttatcc	cgscaggtag	gtgttcccta	tatagtagtg	ttcttaaaca	aagctgacat	120
ggtggatgat	gcggagttat	tagaattagt	tgaatggaa	gtacgcgayt	tggtgagcag	180
ctatgaattt	ccaggagatg	agatcccgat	tgtagtgggt	tcagcattaa	aagcattgga	240
aggcgatacg	agtgatatag	gtgtaccagc	gattgagaag	ttagttgaga	cgatggattc	300
ttatatacct	gagccggtaa	gaaacatcga	taaaagtttc	ttgttaccga	tcgaagacgt	360
gttctcaata	tctggacgag	gaacagtagt	aacaggacgt	atcgaaagcg	ggatcatcaa	420
agttgggtgag	gaagtcgaga	ttgttgggtat	acgtgacact	caaaagacga	catgcacagg	480
cgttgaaatg	ttccgtaaat	tacttgacga	aggtcgagct	ggagacaacg	ttggtatatt	540
gctacgtggt	acgaagcggt	atgaagttga	acgcggacaa	gtattagcta	agccgggaag	600
cattaaaccg	catactaaat	ttgaagctga	agtgtatgtg	ttgtcaaaag	atgaaggtgg	660
acgtcatacc	ccattcttta	acggatatcg	gcctcaattt	tacttcagga	ccacagacgt	720
aactggttct	tgtgatattac	ctgarggtat	agaaatggta	atgccaggtg	ataacgtcaa	780
gctgattggt	agcttacact	caccgattgc	tatggacgaa	ggtttgcgtt	ttgcaatc	838

<210> 112
 <211> 838
 <212> DNA
 <213> *Legionella pneumophila* subsp. *pneumophila* ATCC 33152

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ggttgatgac	cctgagttat	tagagttagt	ggaaatggaa	gtgcgagatt	tattaagcag	180
ttacgatttc	ccaggggatg	acatacctat	tggttgtgggt	tcagctttga	aagcattgga	240
aggtgaagac	agtgatatag	gcgttaaggg	tattgagaaa	ttggttgaaa	caatggattc	300
atacattcct	gagccagtta	gaaacataga	caagcatttt	ttgttgccga	ttgaagacgt	360
attttcaatt	tctggacgag	gaacagtggt	aactgggtcgt	gtagagagtg	gaattgttaa	420
agttgggtgag	gaagttgaaa	ttgttggaaat	aagagacacc	caaaagacga	cttgtacggg	480
tggttgagatg	ttccgtaaat	tacttgatga	aggtcgagct	ggtgataacg	ttggtgtgtt	540
attacgaggt	acgaagcgag	atgaagtggg	gcgtggacag	gtattggcga	agccaggaac	600
catcaagcca	cacaccaagt	ttgaagcaga	agtgtatgta	ttatccaagg	aagaaggcgg	660

acgtcacact	ccattcttta	atggataccg	tccacaattc	tatttcagaa	ccactgacgt	720
gacagggtact	tgtgacttgc	catcaggagt	tgaatatgga	atgcctggag	ataatgtgca	780
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<210> 113
 <211> 828
 <212> DNA
 <213> *Leminorella grimontii* ATCC 33999

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	tgctgggtcg	tcaggtaggc	gttccgtaca	tcctcgtatt	cctgaacaag	tgcgatatgg	120
	ttgatgacga	agagctgctg	gagctgggtg	aratggaagt	tcgcgaactg	ctgtctcagt	180
	acgacttccc	ggcgacgac	actccggtag	tccgcgggtc	agcgtgaaa	gcgctggaag	240
	gcgaagccga	gtgggaarcg	aaaatcatcg	agctggcagg	ccmtctggat	acttatatcc	300
	cagaacctga	gcgtgcgatt	gacaagccgt	tcctgctgcc	katcgaagac	gtattctcta	360
	tctccggccg	tggtaccgtt	gttaccggtc	gtgtagagcg	cggcatcatc	aaagtcgggtg	420
	aagaagtggga	aatcgctcgt	atcaaagata	ccaccaagac	cacctgtacc	ggcgttgaaa	480
	tggtccgtaa	gctgctggac	gaaggccgtg	cgggcgagaa	cgtgggcgtt	ctgctgcgcg	540
	gtaccaagcg	tgacgaaatc	gaacgtggtc	aagttctggc	caagccgggc	accatcactc	600
	ctcacacca	gttcgtgtca	gaagtgtata	tctctgagca	ggatgaaggc	ggccgtcata	660
	ctccgttctt	caaaggctac	cgtcctcagt	tctacttccg	tacgactgac	gtgacaggca	720
	ccatcgaact	gccggaaggc	gtagagatgg	taatgccagg	cgacaacatt	cagatgaccg	780
	taagtctgat	tgccgcgatc	gcaatggacg	aaggctctgcg	cttcgcaa		828

<210> 114
 <211> 826
 <212> DNA
 <213> *Leminorella richardii* ATCC 33998

<400> 114	gctatcctgg	ttgttgctgc	gactgacggc	ccaatgcctc	agactcgtga	gcacatcctg	60
	ctgggtcgcc	aggtaggcgt	tccttacatc	atcgtgttcc	tgaacaagtg	cgacatgggt	120
	gatgacgaag	agctgctgga	actggtagaa	atggaagttc	gtgaacttct	gtctcaatac	180
	gacttcccgg	gcgacgatac	gccggttggt	cgcggttcag	cgctgaaagc	gctggaaggt	240
	gacgcygagt	gggaarcgaa	aatcattgaa	ctggcggaat	ccttrgatac	ttayattcca	300
	gagccagagc	gtgcgattga	caagccgttc	ctgctgccta	tcgaagacgt	tttctctatc	360
	tctggccgtg	gtactgtagt	caccggtcgt	gtagagcgcg	gcatacatcaa	agttgggtgaa	420
	gaagtggaaa	tcgtgggaat	caaagacacc	accaagacca	cctgtactgg	cgttgaaatg	480
	ttccgtaagc	tgctggacga	aggccgtgca	ggtgagaacg	ttggtgttct	gctgcgyggg	540
	actaagcgtg	acgaaatcga	acgtggtcag	gtactggcta	agccaggcac	catcactcct	600
	cacacagaat	tcgtgtcaga	agtgtatatc	cttagcaagg	atgaaggcgg	ycgtcatact	660
	ccgttcttca	aaggctaccg	tcctcagttc	tacttccgta	cgactgacgt	gaccggcacc	720
	atcgaactgc	cagaaggcgt	agagatggta	atgccaggcg	ataacatcca	gatggtagtt	780
	acgctgattg	ccccaatcgc	gatggacgaa	ggtctgcgct	tcgcaa		826

<210> 115
 <211> 843
 <212> DNA
 <213> *Leptospira interrogans* ATCC 23581

<400> 115	tgccgcgatt	ctttagtagt	ccgcaactga	cggacctatg	ccacaaacaa	aagaacatat	60
	ccttcttgc	cgtcaggtag	gtgttccata	tgtaattgta	ttcattaaca	aagcagatat	120
	gcttgctgct	gacgaaagag	cagaaatgat	cgaaatgggt	gagatggacg	ttcgtgaact	180
	tctcaataag	tatagcttcc	caggagatac	aactcctatc	gttcatgggt	ctgcggtaaa	240
	agcacttgag	ggcgatgaat	ctgaaattgg	gatgcctgca	attctcaaat	tgatggaagc	300
	tctggatact	ttcgtttccaa	atccaaaacg	tgtaatcgac	aaacctttcc	ttatgccagt	360
	agaagacgtt	ttctcgatca	ctggctcgtg	aactggttgc	actggaagag	tggaacaagg	420
	tgttttgaaa	gtgaacgacg	aagttgaaat	tatcggatc	cgcccaacaa	caaaaactgt	480
	tgttaccggt	atcgaaatgt	tcagaaaaact	tctcgatcaa	gcggaagctg	gcgacaacat	540
	cggcgctctt	cttcgtggaa	ctaaaaaaga	agaaatcgaa	agaggggcaag	ttcttgcgaa	600
	gccaggttct	atcactcctc	acaaaaaggt	tgccgctgag	gtgtatgtat	taactaagga	660

tgaaggcgga	cgtcatactc	cgtttatcaa	taactaccgt	cctcagtttt	actttagaac	720
aactgacgta	accggagttt	gtaaccttcc	taatgggtgc	gaaatgggta	tgccctgggta	780
taacgtttct	ttgacgggtg	aattgattag	cccgatcgca	atggacaagg	gtcttaagtt	840
cgc						843

<210> 116
 <211> 832
 <212> DNA
 <213> *Megamonas hypermegale* ATCC 25560

<400> 116						
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ccttctcgct	cgtcagggtt	gtgttccagc	tatcggttga	ttcctcaaca	aagctgacca	120
gggtgatgac	cctgaacttc	tcgaacttgt	tgaatggaa	gttcgtgaac	ttctttccag	180
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aggcgacgaa	gaagctaaaa	agaaaattct	tgaattaatg	gatgctgttg	atgattacat	300
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gagcatcgaa	ctcatcactc	caatcgctat	tgaaaaaggt	cttcgcttcg	ct	832

<210> 117
 <211> 820
 <212> DNA
 <213> *Mitsuokella multacida* ATCC 27723

<400> 117						
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cctgctcgct	cgccagggtcg	gtgttccggc	aatcggtgtc	ttcctcaaca	agggtgacca	120
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gatcacgggc	cgtgggtacgg	ttgcaacggg	ccgcgttgag	cgtgggtgagc	tcaagatgaa	420
cgatacgggt	gagatcggtg	gtctgcagga	cgagccgcgt	cagacgggtg	tcacgggcat	480
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<210> 118
 <211> 831
 <212> DNA
 <213> *Mobiluncus curtisii* subsp. *holmesii* ATCC 35242

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cctgttgggt	aagcagggtt	gcgtgccctc	cctcctgggt	gctctgaaca	agtgcgattc	120
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gaagcagggc	ttcgatcgtg	actgcccgat	tatccacgtt	tccgctctga	aggccctgga	240
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aatgttccac	aagtccatgg	acgaagccta	cgccggcgag	aactgtgggtc	tggtgctgctg	540
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cccgcacacc aagttcgagg gcaagggtcta catcttgaag aaggacgaag gtggacgtca 660
caagtcgttc tacgacgggt accgcccgcga gttcttcttc cgcaccaccg acgtgaccgg 720
tggtattcac ctgcccgaag gcaccgaaat ggttatgcct ggcgacacca ccgaaattag 780
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<210> 119
 <211> 825
 <212> DNA
 <213> *Moellerella wisconsensis* ATCC 35017

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gtagacgacg aagagctggt agaactgggt gaaatggaag tccgtgagct gctgtctcag 180
tacgatttcc caggcgatga cactccagta atccgtgggt cagcgtgaa agctctggaa 240
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gaagaagttg aaatcgttgg tatcaaagat accgtgaaaa caacatgtac tggcgttgaa 480
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ccgcatacaa ctttcgaatc agaagtttac atcctgagca aagatgaagg tggccgcatc 660
actccattct tcaaaggtta ccgtccacag ttctacttcc gtacaactga cgtaaccggg 720
actatcgaac tgccagaagg cgttgagatg gtaatgccag gtgataacat caaatgatc 780
gttactctga tccacccaat tgcaatggat gcaggctctg gttttt 825

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<210> 120
 <211> 827
 <212> DNA
 <213> *Branhamella catarrhalis* ATCC 43628

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<400> 120
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ggttgatgat gaagagctac tagaattggg tgaaatggaa gttcgtgaac ttctatctga 180
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agttgggtgat gaaattgaaa tcatcggtat caaaccaact gctaaaacca cctgtactgg 480
tggtgaaatg ttccgtaaac tgtagacga aggtcgtgca ggtgagaact gtggtatctt 540
gttgcgtggg actaagcgtg aagaagttca acgcggtcaa gtacttgcaa aaccagggtt 600
aatcacccca catactaagt ttgatgctga agtttatgta ctgtcaaaag aagaagggtg 660
tcgtcacacc ccattcttaa atggctatcg cccacagttc tacttccgta ccacagatgt 720
gactggtgcc atcactctac aagaaggtag cgaaatgggt atgcctgggtg acaatggtga 780
gatgagtggt gagcttatcc acccaatcgc caggataaag gtctacg 827

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<210> 121
 <211> 806
 <212> DNA
 <213> *Morganella morganii* subsp. *morganii* ATCC 25830

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<400> 121
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ggttgatgat gaagagctgc tggaaactgg tgaaatggaa gttcgtgaac ttctgtctca 180
gtacgatttc cctggcgacg acacgccaat cgttcgcggt tcagcgtgta aagcactgga 240
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ccctgagcca gagcgtgcaa ttgacaagcc gttcctgctg ccaatcgaag acgtattctc 360
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aatgttccgc aaactgctgg acgaaggccg tgcmggtgag aacgtcgggt ttctgctgcg 540
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accacayacc	aaatttgaat	cagaagttta	tattctgagc	aaagatgaag	gtggtcgtca	660
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tactatcgaa	ctgccggaag	gcgttgaaat	ggtaatgccg	ggcgacaaca	tcaaaatgat	780
cgtcaccctg	atccacccaa	tcgcaa				806

<210> 122

<211> 825

<212> DNA

<213> Mycobacterium tuberculosis strain TB 299

<400> 122

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gtggacgacg	aggagctgct	cgaactcgtc	gagatggagg	tccgcgagct	gctggctgcc	180
caggaattcg	acgaggacgc	cccggttgtg	cgggtctcgg	cgctcaaggc	gtcgcagggt	240
gacgcgaagt	gggttgccctc	tgtcgaggaa	ctgatgaacg	cggtcgacga	gtcgattccg	300
gacccggtcc	gcgagaccga	caagccgttc	ctgatgccgg	tcgaggacgt	cttcaccatt	360
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gaagttgaga	tcgtcggcat	tcgcccatcg	accaccaaga	ccaccgtcac	cggtgtggag	480
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ggcgtcaagc	gcgaggacgt	cgagcgtggc	caggttgtca	ccaagcccgg	caccaccacg	600
ccgcacaccg	agttcgaagg	ccaggtctac	atcctgtcca	aggacgaggg	cggccggcac	660
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gtggtgacac	tgccggaggg	caccgagatg	gtgatgcccg	gtgacaacac	caacatctcg	780
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<210> 123

<211> 806

<212> DNA

<213> Neisseria cinerea ATCC 14685

<400> 123

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ggttgacgat	gccgagctgt	tggagctggt	tgaatggaa	atccgtgact	tgctgtcaag	180
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aggcgacgca	gcttacgaag	aaaaaatctt	cgaattggct	gctgcattgg	acagctacat	300
cccaacacct	gagcgtgcag	tggacaaacc	ttcttgttg	cctatcgaag	acgtattctc	360
tatttccggg	cgcggtacag	tagtaaccgg	tcgtgtagag	cgcggtatca	tccacgttgg	420
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cgcggttact	ttggaagaag	gtgtagaaat	ggtaatgccg	ggtgagaacg	taaccattac	780
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<210> 124

<211> 822

<212> DNA

<213> Neisseria elongata subsp. elongata ATCC 25295

<400> 124

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ggttgaygat	cgccaactgc	tggaaactggt	tgaatggaa	atccgtgact	tgctgtcaag	180
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cccgacacct	gagcgtgccg	tggacaaacc	gttctgtgtg	cctatcgaag	acgtattctc	360
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tgacgagatc	gaaatcgtag	gtctgaaaga	aacccaaaaa	accacttgta	ccggtgttga	480
aatgttccgc	aaactgctgg	acgaaggtca	agcaggtgac	aacgtaggcg	tattgctgcg	540
cggtacaaa	cgtgaagaag	tggaaacgcg	tcaagtattg	gctaaaccgg	gtaccatcac	600

tectcacacc	aaattcaaag	cagaagttta	cgtattgagc	aaagaagagg	gtggtcgtca	660
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tgcggttact	ttggaagaag	gtgtagaaat	ggttatgcct	ggtgagaacg	tggccatcac	780
tgtagaactg	attgcaccta	tcgctatgga	agaaggctctg	cg		822

<210> 125
 <211> 820
 <212> DNA
 <213> *Neisseria flavescens* ATCC 13120

<400> 125						
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gtagacgatg	ccgagctggt	ggaactgggt	gaaatggaaa	ttcgtgactt	gttgtcaagc	180
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gcagttactt	tggagaaggg	cgtagaaatg	gtaatgccag	gtgagaacgt	aaccattact	780
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<210> 126
 <211> 830
 <212> DNA
 <213> *Neisseria gonorrhoeae* ATCC 49226

<400> 126						
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gtcgacgatg	ccgagctggt	ggaactgggt	gaaatggaaa	tccgcgacct	gctgtccagc	180
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atttccggcc	gcgggtaccgt	agtcaccggc	cgtgtagagc	gaggtatcat	ccacgttggt	420
gacgagattg	aaatcgctcg	tctgaaagaa	acccaaaaaa	ccacctgtac	cggcgttgaa	480
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gcgggttactt	tggaaaaagg	tgtggaaatg	gtaatgccgg	gtgagaacgt	aaccattact	780
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<210> 127
 <211> 816
 <212> DNA
 <213> *Neisseria lactamica* ATCC 23970

<400> 127						
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tctgttggtc	cgccaagtag	gtgtacctta	catcatcgta	ttcatgaaca	aatgcgatat	120
ggtcgacgat	gccgagctgt	tggaaactgg	tgaatggaaa	atccgcgacc	tgctgtcaag	180
ctacgacttc	ccaggcgacg	actgcccac	cgtacaagggt	tccgcactga	aagctttgga	240
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gatgttccgc	aaactgctgg	acgaagggtc	ggcaggcgac	aacgtaggcg	tattgctgcg	540
cggtaccaaa	cgtgaagaag	tggaaacggg	tcagggtatta	gcaaaccggg	gtaccatcac	600

tccgcacacc	aagttcaaag	cagaagtgtg	tgtattgagc	aaagaagagg	gcggtcgtca	660
cactccgttc	ttcgccaact	accgtccgca	attctacttc	cgtaccaccg	acgtaaccgg	720
cgcggttact	ttggaagaag	gcgtggaaat	ggtaatgccc	ggtgagaacg	taaccattac	780
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<210> 128
 <211> 831
 <212> DNA
 <213> *Neisseria meningitidis* ATCC 13077

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cctgctggcc	cgtcaagtag	gcgtacctta	catcatcgtg	ttcatgaaca	aatgcgacat	120
ggtcgacgat	gccgagctgt	tggaactggt	tgaaatggaa	atccgcgacc	tgctgtccag	180
ctacgacttc	cccggcgacg	actgcccgat	cgtacaagg	tccgcactga	aagccttgga	240
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<210> 129
 <211> 815
 <212> DNA
 <213> *Neisseria mucosa* ATCC 19696

<400> 129						
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ggttgacgat	gccgaaytgt	tggaactggt	tgaaatggaa	atccgtgact	tgctgtcaag	180
ctacgacttc	cctggygacg	actgcccgat	tgtacaagg	tctgcactga	aagccttgga	240
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tgacgagatc	gaaatcgtag	gtctgaaaga	aacccaaaaa	accacatgta	ccggtgttga	480
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 <212> DNA
 <213> *Neisseria sicca* ATCC 9913

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gcggttactt tggaagaagg tgtagaaatg gttatgcctg gtgagaacgt agccatcact 780
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<210> 131
<211> 814
<212> DNA
<213> *Neisseria subflava* ATCC 14221

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<400> 131
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gttgacgatg ccgagctggt ggaactgggt gaaatggaaa tccgtgacct gttgtcaagc 180
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<210> 132
<211> 818
<212> DNA
<213> *Neisseria weaveri* ATCC 51223

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gatgatgcag agctgctgga attggtagaa atggaaatcc gtgatctgct gagcagctac 180
gatttccctg gcgatgattg yccaatcgtg caaggttctg ctttgaaagc tttggaaggt 240
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cayaccaaat tcaaagcaga rgtktatgtw ttgagyaagg aagaaggcgg tcgctcact 660
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<210> 133
<211> 836
<212> DNA
<213> *Ochrobactrum anthropi* ATCC 49188

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atacgatttc ccgggcgacg aagttccgat catcaagggc tcggctcttg ctgctctgga 240
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cggtgaaatg ttccgcaagc tgctcgayca gggccaggct ggcgacaaca tcggcgctct 540
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tgtgaagccg	cacaccaagt	tcaaggcaga	agcctacatt	ctgaccaagg	acgaaggtgg	660
ccgtcatacg	ccgttcttta	cgaactaccg	tccgcagttc	tacttccgca	cgacggacgt	720
gaccggtggt	gtcacgctgc	cggaaggcac	ggaaatgggt	atgcctggcg	acaacgtcgc	780
tatggacgctc	accctgatcg	tgccgatcgc	catggaagag	aagctccgct	tcgcta	836

<210> 134
 <211> 805
 <212> DNA
 <213> *Pantoea agglomerans* ATCC 27155

<400> 134						
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tgagtgggaa	gcaaaaatcg	ttgagctggc	tgaacacctg	gacaactaca	tcccggatcc	300
agtcgctgcg	atcgacatgc	cgttcctgct	gccaatcgaa	gacgtattct	caatctctgg	360
ccgtgggtacc	gttggtaccg	gtcgtgttga	gcgcggcatc	gttaaagtcg	gcgacgaagt	420
tgaaatcgtg	ggtatcaaag	atactgcgaa	atcaacctgt	accggtgttg	agatgttccg	480
taagctgctg	gaccagggtc	aggcaggcga	aaactgtggg	gttctgctgc	gcggtatcaa	540
gcgtgaagac	atccagcgtg	gccagggtct	ggctaagcca	ggctcaatca	agccgcacac	600
ccagttcgag	tcagaagttt	acgttctgtc	taaagacgaa	ggtggccgcc	atactccgtt	660
cttcaaaggc	tatcgtccac	agttctactt	ccgtacaact	gatgtaaccg	gttcagtaga	720
gctgccagaa	ggcgttgaga	tggtcatgcc	aggcgacaac	atcaaaatgg	ttgttaccct	780
gatccaccca	atcgcaatgg	acgaa				805

<210> 135
 <211> 825
 <212> DNA
 <213> *Pantoea dispersa* ATCC 14589

<400> 135						
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gctggggccgt	cagggtggcg	ttccttacat	catcgtgttc	ctgaacaagt	gtgacatggg	120
tgatgacgaa	gagctgctgg	aactgggtga	gatggaagtt	cgcgatctgc	tgtctcagta	180
cgacttccca	ggcgacgata	ccccaatcgt	acgcggttct	gcgctgaaag	cgctggaagg	240
cgacgtgag	tggaagcg	aagtcgttga	gctggctggg	cacctggata	cttacattcc	300
agatccagta	cgtgctatcg	atctgccgtt	cctgctgcca	atcgaagacg	tattctcaat	360
ctctggccgt	ggtaccgttg	ttaccggctc	tggtgagcgc	ggcatcgtga	aagtgggcga	420
cgaagtagaa	atcggttgga	tcaaagcgac	tgccaagtct	acctgtaccg	gtgttgaaat	480
gttccgcaaa	ctgctggacc	agggtcaggc	aggcgagaac	tgtggtgttc	tgctgcgcgg	540
tatcaagcgt	gaagagatcc	agcgtggcca	ggttctggct	aagccaggca	ccatcaagcc	600
acacaccaag	ttcgtatcag	aagtgtacgt	actgtctaaa	gacgaaggcg	gccgtcatac	660
tccgttcttc	aaaggctacc	gtccacagtt	ctacttccgt	acyactgatg	tgaccggcam	720
catmgaactg	ccagaaggcg	ttgagatggg	aatgccaggc	gacaacatca	aaatgrccgt	780
tgagctgatc	cacccaatcg	cgatggacca	gggtctgcgt	ttcgc		825

<210> 136
 <211> 762
 <212> DNA
 <213> *Pasteurella multocida* NCTC 10322

<400> 136						
cacaaacacg	tgagcacatc	cttttaggtc	gccaagtagg	cgttccttac	atcatcgtat	60
tcttaaacaa	atgcgacatg	gtggatgatg	aagaattatt	agaattagtt	gaaatggaag	120
tgctgaact	tctttctcaa	tatgatttcc	caggatgatga	tacaccaatc	gtacgtgggt	180
cagcgttaca	agcgttaaag	ggygtagctg	agtgggaaga	gaaaattctt	gagttagcca	240
accacttaga	tacttacatt	ccagagccac	aacgtgcaat	cgaccaaccg	ttccttcttc	300
cgattgaaga	cgtgttctca	atttctgggt	gtggtacagt	agtaacaggt	cgtgttgagc	360
gtggatcat	ccgtacaggt	gaagaggttg	aaattgttgg	tattaaagcg	acaacgaaga	420
ccacagtaac	aggtgttgag	atgttccgta	aattattaga	cgaaggtcgt	gcgggtgaga	480
acgttggtgc	tttattacgt	ggtactaarc	gtgaagaaat	cgaacgtggg	caagtgttag	540
cgaaaccggg	ttcaatyacg	ccacacactg	attttgaatc	agaagtttac	gtgttatcaa	600

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aagaagaagg tggctgcat acaccattct tcaaagggtta ccgtccacag ttctacttcc 660
gtacaacgga cgtaacaggt acaatcgaat taccggaagg tggtgagatg gtgatgcctg 720
gtgataacat caagatgact gtaagtttga ttcacccaat cg 762
```

<210> 137
 <211> 832
 <212> DNA
 <213> *Peptostreptococcus anaerobius* ATCC 27337

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<400> 137
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cttattatca agacaagtag gagtaccata tatcgtagta tatttgaata aagcagatat 120
ggtagaagat gaagaattat tagaattagt agaaatggaa gtaagagaat tactatctga 180
atatggattc ccaggagatg aaattccaat cataacagga tcataccttag gagcattaaa 240
tggagaacaa aaatggatag atcaaatcat ggcattgatg aaagccgtag atgaatata 300
tccaacaccg gaaagagcag tagatcaacc attccttgatg ccaatcgaag acgtatttac 360
aattacagga agaggaactg tagtaacagg aagagttgaa agaggagttg taaaagtwgg 420
agaagaagtt gaaatcgtag gaatcaaagc gacaacaaag acaacttgta cyggagtaga 480
aatgttccga aaattatttg atcaaggaca agcaggagat aacatcggag ctttattrag 540
aggaaccaag aaagaagatg tagaaagagg acaagtattg gcaaaaccag gaacaattca 600
tcctcatata aacttcagtg gagaagtata tgtattgaca aaagaagaag gaggaagaca 660
tactccattc ttctcaggat acagaccaca attttacttt agaaccacag atattacagg 720
agcagtaaca ttaccagaag gagtagaaat ggtaatgccc ggagataata tcacaatgac 780
agtagaattg attcacccaa ttgcaatgga aacaggatta cgatttgcaa tt 832
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<210> 138
 <211> 823
 <212> DNA
 <213> *Peptostreptococcus asaccharolyticus* strain LSPQ 2639

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gacaagttgg tgtaccaaag atagtagtat tcctaaacaa agaagaccaa gtagacgatc 120
cagaactaat tgaattagta gagatggaaa tcagagacct actatcagaa tatgacttcg 180
ayggagacaa cacaccaatc gtagtaggat cagcattaaa agccctagac gatccagacg 240
gagaatgggg agacaaaatc gtaaaactaa tgggaagmagt agacgaatac atcccaacac 300
cagtaagaga tacagaacac ccattcctaa tgccaatcga agacrtattc tcaatyacag 360
gaagaggaac agtagcaaca ggaagagtag aacaaggtgt agtaaaagta ggmgaacacag 420
tagaactagt aggcttaaca gacgaaagca gacaagtagt agtaacaggt gtagaaatgt 480
ttagaaaaca actagaccta gcagaagcmg gagacaacat tggagcccta ctaagaggag 540
tacaaagaga agaaatccaa agaggacaag tactagcagc accaggaaca atcaaaccac 600
acacaaaatt tgaagcagaa gtatacgtac taacaaaaga agaaggtgga agacacacac 660
cattctttta cggatacaga ccacaattct acttcagaac aacagacgta acaggagaca 720
tccaactagc agacggagta gaaatggtaa tgccaggaga caactcaaca tttacagtaa 780
cactaatcac accaatcgca atggacgaag gactaagatt cgc 823
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<210> 139
 <211> 832
 <212> DNA
 <213> *Peptostreptococcus prevotii* ATCC 9321

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<400> 139
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tagcaagaca agtaggcgtt ccaaaaatcg cagtattcct aaacaaaagaa gaccaagtag 120
acgatccaga actaatcgaa ttagtagaaa tggaaatcag agacctactt tcagaatacg 180
acttcgatgg agacaacgct ccagtagtag taggatctgc tcttaaatac ctagaagaag 240
gcggagaagg cccatgggtc gacaaaatcc ttgacctaat ggcacaagta gacgaatact 300
tcgacatccc agaaagagac aacgaccaac cattcctaatt gccagtagaa gacgtaactg 360
caatctcagg acgtggaaca gtagcaacag gaagagttga aagaggaaca ctaaaagttg 420
gtgatacagt agaaatcgta ggactaacag aagatacaaa agaaacagta gtaactggag 480
tagaaatgtt ccacaaatcm ctagaccaag cagaatctgg agataacgta ggactactac 540
taagaggagt aacaagagat caaatctcaa gaggacaagt actagcaaaa ccaggwtcag 600
taaaccaca cacagaattc gaaggtcaag tatacgtact aacaaaagaa gaaggtggac 660
```

gtcacacacc	attctttcagt	ggatatagac	cacaattctt	ctttagaaca	acagacgtaa	720
caggagacat	cgaactagaa	gaaggcgtag	aaatggtaat	gccaggagac	aacgcaacat	780
tcaaaatcac	actccaaaaa	ccaatcgctc	tagaagaagg	actaagattc	gc	832

<210> 140
<211> 831
<212> DNA
<213> *Porphyromonas asaccharolytica* ATCC 25260

<400> 140						
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cctactagca	cgtcagggtca	acgtacctcg	tctagttgtc	tttatgaaca	agtgcgacct	120
tggtgatgac	gaggagatgc	tcgagctcgt	agagatggat	atgcgtgagc	tactaagctt	180
ctatgacttt	gacggcgaca	acactcctgt	catccgtggg	tctgctcttg	gtgctctcaa	240
tggtgagcct	aagtgggtag	agaaggttat	ggagctcatg	gaggctgtag	acacttggat	300
cccactacct	gagcgcgaca	tcgacaagcc	tttccaatg	cctgtagagg	acgtattctc	360
tatcacagg	cgtggtactg	tcgctactgg	tcgtatcgag	actggtgtcg	ttaagggtcaa	420
cgatgaggtt	cagatcatcg	gtctaggtgc	tgagggttaag	aagagcgtcg	taactggcgt	480
ggaaatgttc	cgcaagatcc	ttgatgagcg	tgaagctggg	gataacgtag	gtctcctact	540
ccgtgggtatc	gacaaggacg	agatcaaggc	cggtatgggtc	ctagcacacc	cagggtcagg	600
caagcctcac	gatcacttca	aggctgaggt	ctatatcctg	aagaaggaag	agggtgggtcg	660
tcacacacca	ttccacaaca	agtaccgtcc	tcagttctac	atccgtacgc	tagacgtaac	720
gggcgagatc	acactcccag	agggtgtaga	gatgggttatg	cctggtgata	acgtcaccat	780
cgatgtcaag	ctcatctctc	cagtagcttg	tagcgtaggt	ctacgcttcg	c	831

<210> 141
<211> 818
<212> DNA
<213> *Porphyromonas gingivalis* ATCC 33277

<400> 141						
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ccttttggct	cgccaggtaa	acgttcctcg	tctggttggt	ttcatgaaca	aatgtgacat	120
ggtagacgat	gaagagatgc	tcgagcttgt	tgaatggac	atgcgcgaac	tcctttcttt	180
ctacgatttc	gatggtgaca	atacccttat	catccgtggg	tctgctctgg	gcgctttgaa	240
tgtagagcct	cagtgggaag	acaagggtat	ggagcttatg	gaagctgttg	acaactgggt	300
tcccctgcct	gagcgcgata	tcgacaaacc	gttcttgatg	ccggttgaag	acgtgttctc	360
tatcacgggt	cgtggtacgg	tcgctacagg	acgtatcgaa	accggtattg	tgaagaccgg	420
tgacgaagtt	caaatacatcg	gcctcgggtg	agaaggaatg	aagtcggttg	ttacgggtgt	480
tgaatgttc	cgtaagattc	ttgacgaagg	tcaggctggg	gacaacgttg	gtctcctcct	540
gcgtgggtatc	gataaggatc	agatcaagcg	tggtatgggt	atctctcacc	cgggtaagat	600
tactcctcac	aagagattta	aggccgaggt	ttatatcttg	aagaaagaag	aagggtgggtcg	660
ccacactcct	ttccacaaca	aatatcggtc	gcagttctac	atccgtacgc	ttgacgtgac	720
cggtgaaatc	actcttcccg	aaggaaacaga	aatgggttatg	cccggtgaca	acgtaacgat	780
caactgtagaa	ctcatctacc	cgggtgcatg	taatgtag			818

<210> 142
<211> 830
<212> DNA
<213> *Pragia fontium* ATCC 49100

<400> 142						
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cctgttaggy	cgccagggtg	gcgtaccata	catcattgtg	ttcctgaaca	agtgtgacat	120
ggttgaygat	gaagagctgt	tagaactggg	tgaatggaa	gttcgtgagc	ttctgtctca	180
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aatctctggc	cgtggtacag	tagtaaccgg	tcgtgtagag	cgcggtatcg	ttaaagttgg	420
tgaagaagtt	gaaatcggtg	gtatcaaaga	tactgtgaaa	acaacttgta	ctggcggtga	480
aatgttccgt	aarttactgg	atgaaggccg	tgccgggtgag	aacggttggtg	ttctgctgctg	540
tggtactaag	cgtgatgaaa	tcgaacgtgg	tcaagtatta	gcaaaaccag	gttcaatcaa	600
cccgcatact	aacttcgtat	cagaagttta	tatcctgagc	aaagatgaag	gtggtcgtca	660

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tactccattc ttcaaaggct accgtccaca gtttacttc cgtacaactg acgtgaccgg 720
taccatcgaa ctgccagaag gcgtagagat ggtaatgcca ggtgataaca ttcagatgac 780
tgtaactctg attgccccaa tcgcgatgga cgaaggttta cgcttcgcta 830
```

<210> 143
<211> 821
<212> DNA
<213> *Prevotella melaninogenica* ATCC 25845

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<400> 143
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attgctcgct cgtcaggtaa acgtacctcg cttggttgta ttcttgaaca agtgtgatat 120
ggttgacgat gctgagatgc ttgacctcgt tgagatggag gttcgtgaga tcctcgagca 180
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tgttgagaag tgggtagact ctgtaatgga gctcatggat actgttgaca cttggattga 300
agagccagag cgtgagattg acaagccatt cttgatgcct gttgaggacg tattctctat 360
cacaggctcg ggtactgtag ctactggctg tatcgagact ggtatctgta aggtagggtga 420
tgaggttcag ttgctcggct tcggtgagga caagaagtct gttatcactg gtgttgagat 480
gttccgtaag aaccttccaa caggctcaggc tgggtgacaac gtaggtctcc tccttcgtgg 540
tatcgataag gctgaggtta agcgtggat ggttggtttg caccagggtg ctattactcc 600
tcacgatcac ttcaaggcat ctatctatgt attgaagaag gaagagggtg gtcgcatcac 660
tccattcggg aacaagtatc gtccacagtt ctacctcgt acaatggact gtacagggtga 720
aatccacctc ccagagggcg ttgagatggg tatgccaggg gacaacgtag agattgaagt 780
tgtattgatc tataagggtg ctttgaacga gggctctcgt t 821
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<210> 144
<211> 827
<212> DNA
<213> *Prevotella oralis* ATCC 33269

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<400> 144
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gcttcttgct cgtcagggtga acgtacctcg tttggctcgt ttcttgaaca agtgcgatat 120
ggttgacgat gaagaaatgc ttgagctcgt agaaatggag cttcatgaac ttctcgagca 180
gtatgaatat gaggaggata ctccattatg tcgtggttcg gcacttggtg ctctgaatgg 240
agtagagaag tgggttgaca gcgtgatgaa gttgatggat accgttgatg aatggataca 300
ggaaccaccg cgtgatcttg ataagccttt cttgatgccg gtagaggatg tttttctat 360
tactggtcgt ggaacgggtg ttacaggccg tattgaaact ggtaagggtta aggtgggcga 420
tgaagttcaa cttcttggtc tcggtgaaga taagaagtcc gttgtgacag gcgttgagat 480
gttccgtaag attcttgacg aaggtgaagc tgggtgataat gtaggcttgc tgcttcgtgg 540
tatcgataag acggaagtaa agcgtggat ggttgtcgt catccggggg ctattactcc 600
tcacgatcat ttcaaggctt cagtttacgt attgaagaaa gaagaaggcg gtcgccatac 660
tccgtttggt amcaagtatc gtccacagtt ctatcttcgt accatggact gtactgggtga 720
aattactctt ccggaaggag ttgagatggg aatgccgggt gataacgtcg aaattgaagt 780
taagttgatc tatccggtag ctttgaacga gggacttcgt ttcgcta 827
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<210> 145
<211> 833
<212> DNA
<213> *Propionibacterium acnes* ATCC 6919

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<400> 145
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tctgctcgct cgtcagggtg gcgtgcccgc catcgctcgt gccctcaaca agtgcgacat 120
ggttgacgat gaggagctca ttgagctcgt cgagatggag gtccgcgagc tgctgacctc 180
gcaggagttc gacggcgaca actgccctgt cgttcgcata tccgccttcc aggccctcca 240
gggtgatgag aagtggaccc agtcgatcct cgacctcatg gacgccgtgg acgagtacat 300
ccgcagcct gagcgcgatc tcgacaagcc cttccttatg ccgatcgagg acgtcttcac 360
catcaccggc cgtggcaccg ttgtcaccgg tcgtgtcgag cgcggcgtcg tcaagactgg 420
cgaagaggtc gagatcgctg gtatccacga gaagaccag aagaccaccg ttaccgggtg 480
cgagatgttc cgcaagatcc tcgacgaggg ccgcgctggt gagaacgtcg gcgttctgct 540
ccgtggcacc aagaaggagg atgtcgttcg cggcatggtc ctctccaagc ctggttccac 600
caccctccac accgacttcg agggccagggt ctacgtcctc aagaaggatg aggggtggccg 660
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ccacaagccg ttcttctccc actacagccc ccagttctac ttccgtacca cggacgtgac 720
tggcactggt gagctccccg agggcaccga gatgggtcatg cctggcgaca acaccgacat 780
gactgtgcac ctgattcacc cggttgccat ggaggatcag ctcaagttcg cta 833
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<210> 146
<211> 745
<212> DNA
<213> *Proteus mirabilis* ATCC 35659

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<400> 146
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tcctgaacaa atgtgacatg gtagatgatg aagagctggt agaattagtt gaaatggaag 120
ttcgtgaact tctgtctcaa tacgatttcc caggtgatga cactccagta atccgtgggt 180
cagcgctgaa agcactggaa ggcgaagcag agtgggaagc aaaaattggt gaattagcag 240
aagcactgga ttcttatatc ccagagccag agcgtgcaat tgacaaacca ttctgttac 300
caatcgaaga tgtattctca atctcaggcc gtggtacagt agttactggt cgtgtagagc 360
gtggtatcat caaagtaggt gatgaagttg agattgttgg tatcaaagaa accgccaaaa 420
caacttgtag tggcggtgaa atgttccgta aattacttga cgaaggtcgt gcaggtgaga 480
acgtagggtg tctgctgcgt ggtacaaaaa gtgaagaaat cgaacgtgga caagtactgg 540
craaaccagg ctcaatcaac ccacacaaca aatttgaatc agaagtttat attctgagca 600
aagatgaagg tggctgctac actccattct tcaaaggcta ccgtccacag ttctacttcc 660
gtacaactga cgtaactggt actatcgaat taccagaagg cgtagaaatg gtaatgccag 720
gcgacaacgt gaacatgatc gttga 745
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<210> 147
<211> 829
<212> DNA
<213> *Proteus penneri* ATCC 33519

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<400> 147
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ctggttaggtc gtcaggttgg tgttccttac atcatcgtat tcctgaacaa atgtgacatg 120
gtagatgatg aagagttact ggaattagtm gaaatggaag ttcgtgaact tctgtctcag 180
tacgatttcc caggtgatga cactccagta atccgtgggt cagcgctgaa agcactggaa 240
ggcgaagcag agtgggaagc aaaaattggt gaattagcag aagcactgga ttcatacatc 300
ccagarccag agcgtgcaat tgacaaacca ttctgttac caattgaaga cgtattctca 360
atttcaggcc gtggtacagt agtaacaggt cgtgttgagc gtggcgtaat caaagttggt 420
gaagaagttg aaatcgttgg tattaaccca acagcgaaaa caactgtac tggcggtgaa 480
atgttccgta aattacttga cgaaggtcgt gcaggtgaga acgtagggtg tcttctgcgt 540
ggtactaaac gtgaagaaat cgaacgtgga caagtactgg cgaaaccagg ttcaatcaac 600
ccacacacta aatttgaatc agaagtttat attctgagca aagatgaagg tggctgctac 660
actccattct tcaaaggcta ccgtccacag ttctacttcc gtacaactga cgtaactggt 720
actatcgaat taccagaagg cgtagaaatg gtaatgccag gtgacaacat caacatgatc 780
gttgaactga ttcacccaat cgcgatggac gacggtttac gtttcgcta 829
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<210> 148
<211> 824
<212> DNA
<213> *Proteus vulgaris* ATCC 13315

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cctgttaggt cgccaggttg gtgtacctta catcatcgta ttctgaaca aatgtgacat 120
ggttgatgat gaagaactgc tggaattagt agaaatggaa gttcgtgaac ttctgtctca 180
gtacgatttc ccaggtgatg acactccagt aatccgtggt tcagcgctga aagcactgga 240
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cactccattc ttcaaaggtt accgtccaca gttctacttc cgtacaactg acgtaactgg 720
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tactatcgaa ttaccagaag gcgtagaaat ggtaatgcc a ggtgacaaca tcaacatgat 780
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<211> 745
<212> DNA
<213> Providencia alcalifaciens ATCC 9886

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ttcgtgaact tctgtctcag tacgatttcc caggcgatga cactccagtt gttcgcgggt 180
cagcactgaa agcgcgtggaa ggcaaccag agtgggaagc aaaaattggt gaattagcag 240
gttacctgga ttcttacatc ccagaaccag agcgtgcaat tgacaagcca ttctgctgc 300
caatcgaaga cgtattctca atctctggtc gtggtacagt agtaacaggc cgtggtgagc 360
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aagatgaagg tggctgctcat actccattct tcaaaggcta ccgtccacag ttctacttcc 660
gtacaactga cgtaaccggt actatcgaac tgccagaagg cgtagagatg gtaatgccag 720
gcgacaacat caacatgatc gtgac 745

<210> 150
<211> 830
<212> DNA
<213> Providencia rettgeri ATCC 9250

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tgaagaagtt gaaatcggtg gtatccaaga cacgggttaa acaacttgta ctggcggtga 480
aatgttccgt aaactgctgg acgaaggctg tgcgggtgag aacgttgggt ttctgctgcg 540
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tactatcgaa ctgccagaag gcgtagagat ggtaatgcc a ggtgataaca tcaacatgat 780
cgttaccctg atccacccaa tcgcgatgga cgacgggtta cgtttcgcaa 830

<210> 151
<211> 826
<212> DNA
<213> Providencia rustigianii ATCC 33673

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tgaagaagtt gaaatcggtg gtatccaaga cacrgttaa acaacttgta ctggcggtga 480
aatgttccgt aaactgcttg acgaaggctg tgcgtggtgag aacgttgggt ttttactgcg 540
tggtactaa cgtgaagaaa ttcaacgtgg tcaagtactg gctaaaaccag gttcaatcaa 600
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tactccattc ttcaaagggt accgtccaca gttctacttc cgtacaactg acgtaaccgg 720
tactatcgaa ctgccagaag gcgtagagat ggtaatgcc a ggcgacaaca tcaacatgat 780

cgtgacactg attcacccaa tcgcgatgga tgatgggttta cgtttc

826

<210> 152
<211> 830
<212> DNA
<213> *Providencia stuartii* ATCC 33672

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ggtagacgac gaagagctgc tggaactggt tgaaatggaa gttcgtgaac ttctgtctca 180
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tgaagaagtt gaaatcgtag gtatcaaaga gactgcgaaa accacttgta ctggcgttga 480
aatgttccgt aaactgctgg acgaaggccg tgcgggtgag aacgtagggt ttctgctgcg 540
tggtactaag cgtgaagaaa tcgaacgtgg tcaagttctg gcgaaaccag gttcaatcaa 600
gccacacaca actttcgaat cagaagttta tattctgagc aaagatgaag gtgggtcgtca 660
cagccatttc ttcaaaggyt accgtccaca gttctacttc cgtacaactg acgtaacagg 720
tactatcgaa ctgccagaag gcgtagagat ggtaatgccg ggcgacaacg tgaacatgaa 780
agtaactctg attcacccaa tcgcgatgga cgatgggttg cgtttcgcga 830

<210> 153
<211> 827
<212> DNA
<213> *Pseudomonas aeruginosa* ATCC 35554

<400> 153
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ggaagaagtg gaaatcgtcg gcatcaaggc gaccaccaag accacctgca cggcgttga 480
aatgttccgc aagctgctcg acgaaggctg tgctgggtgag aacgttggtg tctgtctgcg 540
tggcaccaag cgtgaagacg tagagcgtgg ccaggtaactg gccaaagccg gcaccatcaa 600
gccgcacacc aagttcgagt gcgaagtgtg cgtgctgtcc aagggaagaag gtgggtcgtca 660
caccctgttc ttcaagggt accgtccgca gttctacttc cgtaccackg acgtgaccgg 720
tamctgcgag ctgccggaag gcgtagagat ggtaatgccg ggcgacaaca tcaagatggg 780
tgtcacctg atcgtccga tcgccatgga agatggctgc gttcgcg 827

<210> 154
<211> 841
<212> DNA
<213> *Pseudomonas fluorescens* ATCC 13525

<400> 154
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ggtagacgac gctgagctgc tggaactggt tgagatggaa gtgcgcgac tgctgagcac 180
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aggcaaagac gacaacgaaa tgggcaccac gtccgttcgt aaactgggtg aaactctgga 300
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ttcggttaag ccgcacacca gtttcgaagc tgaagtctac gtactgagca aagaagaagg 660
cggctcgtcac actccgttct tcaaaggcta ccgtccacag ttctacttcc gtactactga 720
cgtgactggg aactgcgagc tgccggaagg cgttgaaatg gttatgccag gcgacaacat 780

caaaatgggtt gttaccctga tcaaaacccat cgcaatggaa gacgggtctgc gtttcgctat 840
t 841

<210> 155

<211> 841

<212> DNA

<213> *Pseudomonas stutzeri* ATCC 17588

<400> 155

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cggcgaagac	gacaacgagc	tcggcaccac	tgcggtgaag	aagctgggtcg	agaccctgga	300
cagctacatt	cccagagccgg	ttcgtgccat	cgacaagccg	ttcctgatgc	cgatcgaaga	360
cgtgttctcg	atctccggtc	gcggcacsct	ggtaaccggg	cgcgtagagc	gcggcatcgt	420
caaggttcag	gaagagatcg	agatcgctcg	tctgcgtccg	accaccaaga	ctacctgcac	480
cggcgttgag	atgttccgca	agctgctcga	ygarggtcgt	gctggcgaga	actgcggygt	540
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caccatcaag	ccgcacacca	agttcgaagc	ggaagtgtac	gtgctgtcca	aggaagaagg	660
tggtcgtcac	accccggttc	tyaagggtca	ccgtccckcag	ttctacttcc	gtaccactga	720
ygtgacyggw	tcgtgcgarc	tgccggaagg	cgctcgagatg	gtaatgccgg	gcgacaacgt	780
gaagatgggt	gtcaccctga	tcaagccgat	cgccatggaa	gacggcctgc	gcttcgcgat	840
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<210> 156

<211> 833

<212> DNA

<213> *Psychrobacter phenylpyruvicus* ATCC 23333

<400> 156

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gatgacgaag	agttactaga	gctagtagaa	atggaaagtgc	gtgaattact	ttcagactac	180
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gagatgtttc	gtaagttact	agacgaaggt	cgtgctgggtg	agaactgtgg	tgtactatta	540
cgtgggtacta	agcgtgaaga	cgtaacaacgt	ggtcaagtac	ttgctaagcc	agggttcaatc	600
actccacaca	ccaacttcga	cgcagaagta	tacgtactat	caaaagaaga	agggtggctcg	660
cacactccat	tcttaaatgg	ttaccgtcca	cagttctact	tccgtactac	tgacgtaaca	720
ggtgcaatca	cgttacaaga	aggtagttaa	atggtaatgc	caggcgataa	cggttgagatg	780
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<210> 157

<211> 825

<212> DNA

<213> *Rahnella aquatilis* ATCC 33071

<400> 157

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gtagatgacg	aagagctgct	ggaactggta	gaaatgggaag	ttcgcgaact	tctgtctgct	180
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atctccgggc	gtgggtacagt	ggttaccggg	cgtgtagagc	gcgggtatcgt	taaagtgggc	420
gaagaagttg	aaatcgctcg	tatcaaggag	actggttaagt	ctacttgtag	tggcggtgaa	480
atgttccgca	aactgctgga	cgaaggccgt	cggggacgaga	acgtgggtgt	tctgctgcgt	540
ggatatcaagc	gtgaagacat	cgaacgtggg	caggttctgg	ctaaaccagg	ttcaatcaaa	600
ccacacacca	agtttgattc	cgaagtgtac	atcctgagca	aagatgaagg	tggctcgtcac	660

actccattct tcaaaggcta cgcgccacag ttctacttcc gtacaactga cgtgaccggt 720
actatcgaa tgccagaagg cgttgagatg gttatgcctg gtgacaacgt gaacatgggt 780
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<210> 158

<211> 830

<212> DNA

<213> *Salmonella choleraesuis* subsp. *arizonae* ATCC 13314

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cccggaacca gagcgtgcga ttgacaagcc gttcctgctg ccgatcgaag acgtattctc 360
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cgaagaagtt gaaatcgttg gtatcaaaga gactcagaag tctacctgta ctggcggtga 480
aatgttccgc aaactgctgg acgaaggccg tgccggtgag aacgtagggtg ttctgctgcg 540
tggtatcaaa cgtgaagaaa tcgaacgtgg tcaggtactg gctaagccgg gcaccatcaa 600
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tactccgttc ttcaaaggct accgtccgca gttctacttc cgtactactg acgtgactgg 720
caccatcgaa ctgccggaag gcgtggagat ggtaatgccg ggcgacaaca tcaaaatgggt 780
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<210> 159

<211> 832

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 7001

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tccggaacca gagcgtgcga ttgacaagcc gttcctgctg ccgatcgaag acgtattctc 360
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ygaagaagtt gaaatcgttg gtatcaaaga gactcagaag tctacctgta ctggcggtga 480
aatgttccgc aaactggttg acgaaggccg tgccggtgag aacgtagggtg ttctgctgcg 540
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gccgcacacc aagttcgaat ctgaagtgtg cattctgtcc aaagatgaag gcggccgtca 660
tactccgttc ttcaaaggct accgtccgca gttctacttc cgtactactg acgtgactgg 720
caccatcgaa ctgccggaag gcgtagagat ggtaatgccg ggcgacaaca tcaaaatgggt 780
tgttaccctg atccaccgca tcgcaatgga cgacggctctg cgtttcgcaa 832

<210> 160

<211> 807

<212> DNA

<213> *Salmonella choleraesuis* subsp. *diarizonae* ATCC 43973

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tgaaatcggt ggtatcaaag agactcagaa gtctacctgt actggcggtg aaatgttccg 480
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cttcaaaggc taccgtccgc agttctactt ccgtaccact gacgtgactg gcaccatcga 720
actgccggaa ggcgtggaga tggtaatgcc gggcgacaac atcaaaatgg ttgttaccct 780
gatccaccgc atcgcgatgg acgacgg 807

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<210> 161
 <211> 832
 <212> DNA
 <213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 8326

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ggttgatgac gaagagctgc tggaaactgg tgaatggaa gttcgtgaac ttctgtctca 180
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cgaagaagtt gaaatcgttg gtatcaaaga gactcagaag tctacctgta ctggcggtga 480
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yactccgttc ttcaaaggct accgtccgca gttctacttc cgtactactg acgtgactgg 720
caccatcgaa ttgccggaag gcgtagagat ggtaatgccg ggcgacaaca tcaaaatggt 780
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<210> 162
 <211> 807
 <212> DNA
 <213> *Salmonella choleraesuis* subsp. *houtenae* ATCC 43974

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caagttcgaa tctgaagtgt acattctgtc caaagatgaa ggcggccgtc atactccgtt 660
cttcaaaggg taccgtccgc aattctactt ccgtacgact gacgtgactg gcaccatcga 720
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<210> 163
 <211> 827
 <212> DNA
 <213> *Salmonella choleraesuis* subsp. *indica* ATCC 43976

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<400> 163
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tgatgacgaa gagctgctgg aactggttga aatggaagtt cgtgaacttc tgtctcagta 180
cgacttcccg ggtgacgaca cgcgatcgt cgtggttct gctctgaaag cgctggaagg 240
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ctccggtcgt ggtacygttg ttaccggtcg tgtagagcgc ggtatcatca aagtgggcga 420
agaagtgtga atcgttggtg tcaaagagac tcagaagtct acctgtactg gcgttgaaat 480
gttccgcaaa ctgctggacg aaggccgtgc cggtagaagc gtaggtgttc tgctgcgtgg 540
tatcaaactg gaagaaatcg aacgtggtca ggtactggct aagccgggca ccatcaagcc 600
gcacaccaag ttcgaatctg aagtgtacat tctgtccaaa gatgaaggcg gccgtcatatc 660

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tccgtttcttc aaaggctacc gtccgcagtt ctacttccgt actactgacg tgactggcac 720
catcgaactg ccggaaggcg tagagatggg aatgccgggc gacaacatca aaatgggtgt 780
taccctgata catccgatcg cratggacga cggctctgct ttcgcaa 827
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<210> 164
<211> 807
<212> DNA
<213> *Salmonella choleraesuis* subsp. *salamae* ATCC 43972

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cgaagagctg ctggaactgg tagaaatgga agttcgtgaa cttctgtctc agtacgactt 180
cccgggacgac gacacgccga tcgtgcgtgg ttccgctctg aaagcgctgg aaggcgamgc 240
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agagcgtgagc attgacaagc cgttcctgct gccgatcgaa gacgtattct ccatctccgg 360
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tgaaatcggt ggtatcaaag agactcagaa gtctacctgt actggcgttg aaatgttccg 480
caaactgctg gacgaaggcc gtgcccgtga gaacgtagg gttctgctgc gtggtatcaa 540
acgtgaagaa atcgaacgtg gtcaggtagt ggctaagccg ggcaccatca agccgcacac 600
caagttcgaa tctgaagtgt acattctgtc caaagatgaa ggcggccgct atactccgtt 660
cttcaaaggc taccgtccgc agttctactt ccgtaccact gacgtgactg gcaccatcga 720
actgccggaa ggcgtggaga tggtaatgcc gggcgacaac atcaaaatgg ttgttaccct 780
gatccacccg atcgcgatgg acgacgg 807
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<210> 165
<211> 832
<212> DNA
<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 10749

<220>
<221> misc_feature
<222> (514)..(514)
<223> n represents nucleotide

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<400> 165
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cctgctgggt cgtcaggtag gcgttccgta catcatcgtg ttctgaaca aatgcgacat 120
ggttgatgac gaagagctgc tggaaactgg tgaaatggaa gttcgtgaac ttctgtctca 180
gtacgacttc cggggcgacg acacgccgat cgttcgtggg tctgctctga aagcgctgga 240
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cccgaaccca gagcgtgcga ttgacaagcc gttcctgctg ccgatcgaag acgtattctc 360
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cgaagaagtt gaaatcggtg gtatcaaaga gactcagaag tctacctgta ctggcgttga 480
aatgttccgc aaactgctgg acgaaggccg tgcnggtgag aacgtagggt ttctgctgcg 540
tggtatcaaa cgtgaagaaa tcgaacgtgg tcaggtagtg gctaagccgg gcaccatcaa 600
gccgcacacy aagttcgaat ctgaagtgtg cattctgtcc aaagatgaag gcggccgtca 660
tactccgttc ttcaaaggct accgtccgca gttctacttc cgtactactg acgtgactgg 720
caccatcgaa ctgccggaag gcgtagagat ggtaatgccg ggcgacaaca tcaaaatggg 780
tggttaccctg atccacccga tcgcaatgga cgacggtctg cgttttcgcaa tc 832
```

<210> 166
<211> 817
<212> DNA
<213> *Serratia fonticola* DSM 4576

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<400> 166
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cctgctgggt cgtcagggtg gcgttcccta catcatcgta ttcatgaaca aatgcgacat 120
ggttgatgat gaagagctgc tggaaactgg agaaatggaa gttcgtgaac ttctgtctgc 180
ttatgacttc cctggtgatg acctgccggt tgttcgtggg tcagcgctga aagcactgga 240
aggcgaagct gagtgggaag ctaaaatcat cgagctggcc ggtcacctgg attcctacct 300
cccagaacca gagcgtgcta tcgatcagcc gttcctgctg ccaatcgaag acgtattctc 360
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catctccggt	cgtggtaccg	tagttaccgg	tctgtgtgag	cgcggtatcg	ttaaagttgg	420
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aatgttccgc	aaactgctgg	acgaaggccg	tgctggtgag	aacgttggtg	ttctgctgcg	540
tggtatcaag	cgtgaagaca	tcgaacgtgg	tcagggtactg	gctaaaccag	gttccatcaa	600
gccgcacact	cagttcgatt	cagaagtgtg	tatcctgagc	aaagaagaag	gtggtcgtca	660
tactccattc	ttcaaagggt	accgtccaca	gttctacttc	cgtacaactg	acgtgaccgg	720
taccatcgaa	ctgccagaag	gcgtagagat	ggtaatgcc	ggcgataacg	tgaacatggt	780
tgttaccctg	atccacccaa	tcgctatgga	ccaaggc			817

<210> 167
 <211> 787
 <212> DNA
 <213> *Serratia liquefaciens* ATCC 27592

<400> 167						
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ggcggttcctt	tcacatcatg	attcatgaac	aaatgcgaca	tggttgatga	tgaagagctg	120
ctggaactgg	tagaaatgga	agttcgtgaa	cttctgtctg	cttacgactt	ccctggtgat	180
gacctgccgg	ttgttcgtgg	ttcagcgctg	aaagcactgg	aaggcgaagc	tgagtgggaa	240
gctaaaatca	tcgagctggc	cggttacctg	gattcttaca	tcccagaacc	agagcgtgct	300
atcgacaagc	cgttcctgct	gccaatcgaa	gacgtcttct	ccatctccgg	tcgtggtacc	360
gttggttaccg	gtcgtgttga	gcgcggtatc	gttaaagttg	gcgaagaagt	tgaaatcggt	420
ggtatcaaag	acaccgttaa	gtctacctgt	actggcggtg	aaatgttccg	caaactgctg	480
gacgaaggcc	gtgctggtga	gaacgttggt	gttctgtctg	gtggtatcaa	gcgtgaagac	540
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tcagaagtgt	acatcctgag	caaagaagaa	ggtggtcgtc	atactccatt	cttcaaaggc	660
taccgtccac	agttctactt	ccgtacaact	gacgtgaccg	gtaccatcga	actgccagaa	720
ggcggttgaaa	tggtaatgcc	aggtgacaac	gtgaacatgg	ttgttaccct	gatccaccca	780
atcgcga						787

<210> 168
 <211> 745
 <212> DNA
 <213> *Serratia marcescens* ATCC 13880

<400> 168						
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attcatgaac	aaatgcgaca	tggttgatga	tgaagagctg	ytggaactgg	tagaaatgga	120
agttcgcgaa	ctgctgtccg	cttacgactt	ccctggcgac	gacctgccgg	taatccgcgg	180
ttccgcgctg	aaagcgctgg	aaggcgaagc	tgagtgggaa	gcgaaaatca	tcgaactggc	240
cgaagccctg	gacagctaca	tcccagagcc	agagcgtgct	atcgacaagc	cgttcctgct	300
gccaatcgaa	gacgtattct	ccatctccgg	tcgtggtacc	gttggttaccg	gtcgtgttga	360
gcgcggcatc	atcaaagttg	gcgaagaagt	tgaaatcggt	ggtatcaaag	acaccgttaa	420
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caaagatgaa	ggtggtcgtc	acackccatt	cttcaaaggc	taccgtccac	agttctactt	660
ccgtaccact	gacgtgaccg	gtaccatcga	actgccagaa	ggcgtagaga	tggtaatgcc	720
aggcgacaac	gtgaacatgg	ttgta				745

<210> 169
 <211> 829
 <212> DNA
 <213> *Serratia odorifera* ATCC 33077

<400> 169						
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ctgctgggtc	gccagggttg	cgttcctttc	atcatcgtgt	tcatgaacaa	atgtgacatg	120
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tacgatttcc	ctggcgacga	cctgccagta	atccgcggtt	ctgcgctgaa	agcgctggaa	240
ggcgaagcag	agtgggaagc	taagattgta	gaactggctg	aagcgctgga	ttcttacatc	300
ccagaaccag	agcgtgctat	cgacaagccg	ttcctgctgc	caatcgaaga	cgtattctcc	360
atctccggtc	gtggtaccgt	tggttaccgg	cgtgttgagc	gcggtatcat	caaagttggc	420

gaagaagttg	aaatcggttg	tatcaaagac	accgttaagt	ctacctgtac	cggtgtagaa	480
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ggtatcaagc	gtgaagacat	cgaacgtggg	caggttcttg	ctaaaccagg	ttctatcaag	600
ccgcacacca	aattcgactc	agaagtgtac	atcctgagca	aagaagaagg	tggtcgtcac	660
acgccattct	tcaaaggcta	ccgtccacag	ttctacttcc	gtactactga	cgtgaccggt	720
accatcgaac	tgccagaagg	cgtagagatg	gtaatgccag	gcgataacgt	gaacatgggt	780
gttaccctga	ttcacccaat	cgcaatggac	gacggtctgc	gtttcgcaa		829

<210> 170

<211> 830

<212> DNA

<213> *Serratia plymuthica* DSM 4540

<400> 170

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ggttgatgat	gaagagctgc	tggaactggg	agaaatggaa	gttcgtgaac	ttctgtctgc	180
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cccagaacca	gagcgtgcta	tcgacaagcc	gttcctgctg	ccaatcgaag	acgtattctc	360
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gccacacacc	aagtttgact	cagaagtgtg	catcctgagc	aaagaagaag	gtggctcgta	660
tactccattc	ttcaaaggct	accgtccaca	gttctacttc	cgtacaactg	acgtgaccgg	720
taccatcgaa	ctgccagaag	gcgtagagat	ggtaatgcc	ggtgacaacg	tgaacatggg	780
tgtaaccctg	atccacccaa	tcgcgatgga	cgacggcctg	cgtttcgcaa		830

<210> 171

<211> 829

<212> DNA

<213> *Serratia rubidaea* ATCC 27593

<400> 171

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ctgctggggc	gccaggtagg	cgtaccttac	atcatcgta	tcatgaacaa	atgcgacatg	120
gtagatgatg	aagagctgct	ggaactggta	gagatgggaag	ttcgcgaaact	gctgtctgct	180
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gaagaagtag	aaatcgtagg	tatcaaagac	accgttaagt	ctacctgtac	tggtgtagaa	480
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accatcgaac	tgccagaagg	cgtagagatg	gtaatgccag	gcgacaacgt	gaacatgaaa	780
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<210> 172

<211> 826

<212> DNA

<213> *Shigella boydii* ATCC 9207

<400> 172

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cctgctgggt	cgtcaggtag	gcgttccgta	catcatcgta	ttcctgaaca	aatgcgacat	120
ggttgatgac	gaagagctgc	tggaactggg	tgaatggaa	gttcgtgaac	ttctgtctca	180
gtacgacttc	ccgggcgacg	acactccgat	cgttcgtggg	tctgctctga	aagcgctgga	240
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tccggaacca	gagcgtgcga	ttgacaagcc	gttcctgctg	ccgatcgaag	acgtattctc	360
catctccggg	cgtggtaccg	ttgttaccgg	tcgtgtagaa	cgcggtatca	tcaaagttgg	420

tgaagaagtt	gaaatcggtg	gtatcaaaga	gactcagaag	tctacctgta	ctggcggttga	480
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tgttaccctg	atccacccga	tcgcgatgga	cgacgggtctg	cgtttc		826

<210> 173
 <211> 818
 <212> DNA
 <213> *Shigella dysenteriae* ATCC 11835

<400> 173						
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gtcaggtagg	cgttccgtac	atcatcgtgt	tcctgaacaa	atgcgacatg	gttgatgacg	120
aagagctgct	ggaactgggt	gaaatggaag	ttcgtgaact	tctgtctcag	tacgacttcc	180
cgggacgacg	caactccgatc	gttcgtgggt	ctgctctgaa	agcgctggaa	ggcgacgcag	240
agtgggaagc	gaaaatcctg	gaactggctg	gcttcctgga	ttcytayatt	ccggaaccag	300
agcgtgcatg	tgacaagccg	ttcctgctgc	cgatcgaaga	cgtattctcc	atctccggtc	360
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aaatcggttg	tatcaaagag	acycagaagt	ctacctgtac	tggcgttgaa	atgttccgca	480
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<210> 174
 <211> 806
 <212> DNA
 <213> *Shigella flexneri* ATCC 12022

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cgaagagctg	tggaactgg	ttgaaatgga	agttcgtgaa	cttctgtctc	agtacgactt	180
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agagcgtgcg	attgacaagc	cgttcctgct	gccgatcgaa	gacgtattct	ccatctccgg	360
tcgtggtacc	gttggtaccg	gtcgtgtaga	acgcggtatc	atcaaagttg	gtgaagaagt	420
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<210> 175
 <211> 832
 <212> DNA
 <213> *Shigella sonnei* ATCC 29930

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cctgctgggt	cgtcaggtag	gcgttccgta	catcatcgtg	ttcctgaaca	aatgcgacat	120
ggttgatgac	gaagagctgc	tggaactggg	tgaaatggaa	gttcgtgaac	ttctgtctca	180
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tccggaacca	gagcgtgcga	ttgacaagcc	gttccgtgctg	ccgatcgaag	acgtattctc	360
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<210> 176

<211> 716

<212> DNA

<213> *Staphylococcus aureus* ATCC 13301

<400> 176

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ttagaattag	tagaaatgga	agttcgtgac	ttattaagcg	aatatgactt	cccaggtgac	180
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gttgctacag	gccgtggtga	acgtggtcaa	atcaaagttg	gtgaagaagt	tgaaatcatc	420
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gcagaagtat	acgtattatc	aaaagacgaa	ggtggacgtc	acactccatt	cttctcaaac	660
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<210> 177

<211> 719

<212> DNA

<213> *Staphylococcus aureus* ATCC 29247

<400> 177

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aatatgactt	cccaggtgac	gatgtacctg	taatcgctgg	ttcagcatta	aaagcttttag	180
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ttccaactcc	agaacgtgat	tctgacaaac	cattcatgat	gccagttgag	gacgtattct	300
caatcactgg	tcgtggtact	gttgctacag	gccgtggtga	acgtggtcaa	atcaaagttg	360
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aaatgttccg	taaattatta	gactacgctg	aagctgggtga	caacattggt	gcattattac	480
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caccacatac	tgaattcaaa	gcagaagtat	acgtattatc	aaaagacgaa	ggtggacgtc	600
acactccatt	cttctcaaac	tatcgtccac	aattctatct	ccgtactact	gacgtaactg	660
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<210> 178

<211> 625

<212> DNA

<213> *Staphylococcus aureus* ATCC 33591

<400> 178

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acgtattctc	aatcactggg	cgtggtactg	ttgctacagg	ccgtggtgaa	cgtggtcaaa	360
tcaaagtttg	tgaagaagtt	gaaatcatcg	gtttacatga	cacatctaaa	acaactgtta	420
caggtggttga	aatgttccgt	aaattattag	actacgctga	agctggtgac	aacattggtg	480
cattattacg	tggtggtgct	cgtgaagacg	tacaacgtgg	tcaagtatta	gctgctcctg	540
gttcaattac	accacatact	gaattcaaaag	cagaagtata	cgtattatca	aaagacgaag	600
gtggacgtca	cactccattc	ttctc				625

<210> 179
<211> 704
<212> DNA
<213> *Staphylococcus aureus* ATCC 43300

<400> 179
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gacgatgtac ctgtaatcgc tgggttcagca ttaaaagctt tagaaggcga tgctcaatac 180
gaagaaaaaa tcttagaatt aatggaagct gtagatactt acattccaac tccagaacgt 240
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ttagactacg ctgaagctgg tgacaacatt ggtgcattat tacgtgggtg tgctcgtgaa 480
gacgtacaac gtgggtcaagt attagctgct cctgggtcaa ttacaccaca tactgaattc 540
aaagcagaag tatacgtatt atcaaaagac gaaggtggac gtcacactcc attcttctca 600
aactatcgtc cacaattcta tttccgtact actgacgtaa ctgggtgtgt tcaactacca 660
gaaggtactg aaatggtaat gcctgggtgat aacgttgaaa tgac 704

<210> 180
<211> 730
<212> DNA
<213> *Staphylococcus aureus* subsp. *aureus* ATCC 6538

<400> 180
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tattaagcga atatgacttc ccaggtgacg attgtacctgt aatcgctggg tcagcattaa 180
aagctttaga aggcgatgct caatacgaag aaaaaatctt agaattaatg gaagctgtag 240
atacttacat tccaactcca gaacgtgatt ctgacaaacc attcatgatg ccagttgagg 300
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tcaaagttgg tgaagaagtt gaaatcatcg gtttacatga cacatctaaa acaactgtta 420
cagggtttga aatgttccgt aaattattag actacgttga agctgggtgac aacattgggtg 480
catttttacg tgggtgttgc cgtgaagacg tacaacgtgg tcaagtatta gctgctcctg 540
gttcaattac accacatact gaattcaaag cagaagtata cgtattatca aaagacgaag 600
gtggacgtca cactccattc ttctcaaact atcgtccaca attctatttc cgtactactg 660
acgtaactgg tggtgttcac ttaccagaag gtactgaaat ggtaatgcct ggtgataaac 720
ttgaaatgac 730

<210> 181
<211> 834
<212> DNA
<213> *Staphylococcus auricularis* ATCC 33753

<400> 181
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cttattatca cgtaacgttg gtgtaccagc attagttgta ttcttaaaca aagttgacca 120
agttgacgac gaagaattat tagaattagt agaaatggaa gttcgtgact tattaagcga 180
atacgactac ccaggtgacg atgtacctgt aatctctggt tctgcgttga aagcattaga 240
agggcagaaa gaatacgaac aaaaaatctt agacttaatg caacaagttg acgattacat 300
tccaactcca gaacgtgact ctgataaacc attcatgatg ccagttgaag acgtattctc 360
aatcactggg cgtgggtactg ttgcaacagg ccgtgttgaa cgtgggtcaaa tcaaagtcgg 420
tgaagaagtt gaaatcatcg gtatgaaaga cggttcacaa aaaacaacag ttactgggtg 480
agaaatgttc cgtaaattat tagactacgc tgaagctggg gacaacatcg gtgctttatt 540
acgtgggtatt tcacgtgaag aagtacaacg ttgtcaaagt ttagctgctc ctgggtcaat 600
tacaccacac actaaattca ctgcagaagt ttacgtatta tctaaagatg aaggtggacg 660
tcacactcca ttcttctcta actaccgtcc acaattctat ttccgtacta ctgacgtaac 720
agggtgttgtt actttaccag aaggtacaga aatgggtaatg cctggcgata acgttaaaat 780
ggaagttgaa ttaatttctc caatcgctat cgaagacggt actcgtttct caat 834

<210> 182
<211> 835

<212> DNA

<213> *Staphylococcus capitis* subsp. *capitis* ATCC 27840

<400> 182

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cttattatca cgtaacggtg gtgtaccagc attagttgta ttcttaaaca aagttgacat 120
ggtagacgac gaagaattat tagaattagt tgaaatggaa gttcgtgact tattaagcga 180
atatgacttc ccaggtgatg atgtacctgt aatcgctggg tcagcattaa aagctttaga 240
aggcgtatgct caatacgaag aaaaaatctt agaattaatg caagcagttg atgattacat 300
tccaactcca gaacgtgatt ctgacaaacc attcatgatg ccagttgagg acgtattctc 360
aatcactggg cgtgggtactg ttgctacagg ccgtggtgaa cgtggtcaaa tcaaagttgg 420
tgaagaagtt gaaatcatcg gtatccacga aacttctaaa acaactgtta ctggtgtaga 480
aatgttccgt aaattattag actacgctga agctgggtgac aacatcggtg ctttattacg 540
tggtgttgct cgtgaagacg tacaacgtgg tcaagtatta gctgctcctg gttcaatcac 600
accacacact aaattcaaag cggaagttaa cgttttatct aaagacgaag gtggacgtca 660
cactccattc ttacagtaact accgccaca attctatttc cgtactactg acgtaactgg 720
tggtgttaac ttaccagaag gtactgaaat gggtatgcct ggcgacaacg ttgaaatgac 780
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<210> 183

<211> 804

<212> DNA

<213> *Macrococcus caseolyticus* ATCC 13548

<400> 183

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acgatgaaga attattagaa ttagttgaaa tggaagttcg tgacttatta tctgaatatg 180
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ttgaagaata cgaagacaaa atcatggaat taatggacgc agttgatgag tacatcccaa 300
ctccagaacg tgattctgac aaaccattca tgatgccagt tgaggacgta ttctcaatca 360
ctggtcgtgg tacagttgca actggacgtg ttgagcgtgg acaagttaaa gttggtgaag 420
aagttgaaat cattggttta actgaagaac cagcaaaaac tacagttaca ggtgtagaaa 480
tgttccgtaa attattagat tacgctgaag ctggagataa catcggtgct ttattacgtg 540
gtgtttctcg tgaagacgta caacgtggac aagtattagc taaaccaggt tcaattactc 600
cacatactaa attcaaagct gaagtttacg tattatctaa agaagaaggt ggacgtcata 660
ctccattctt cactaactac cgccctcagt tctacttccg tacaactgac gtaactgggtg 720
tagttaactt accagaaggt actgaaatgg taatgcctgg agataacatc gaaatgaacg 780
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<210> 184

<211> 832

<212> DNA

<213> *Staphylococcus cohnii* DSM 20260

<400> 184

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ccttttatca cgtaacggtg gtgttccagc attagttgta ttcttaaaca aagttgacat 120
ggttgacgat gaagaattat tagaattagt agaaatggaa gttcgtgact tattaagcga 180
atatgacttc ccaggtgacg atgtacctgt aatctctggg tcagcattaa aagctcttga 240
aggcgtgctg gactatgagc aaaaaatctt agacttaatg caagctgttg atgacttcat 300
tccaacacca gaacgtgatt ctgacaaacc attcatgatg ccagttgagg acgtattctc 360
aatcactggg cgtgggtactg ttgctacagg gcgtggtgaa cgtggtcaaa tcaaagtcgg 420
tgaagaagtt gaaatcatcg gtatgcaaga agattcaagc aaaacaactg ttactgggtg 480
agaaatgttc cgtaaattat tagactacgc tgaagctggg gacaacattg gtgcgttatt 540
acgtgggtgt gcacgtgaag acatccaacg ttgtcaagtt ttagctgctc ctggttcaat 600
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tcatacgcca ttcttcagta actatcgccc acaattctat ttccgtacta ctgacgtaac 720
aggtgttggt actttaccag aaggtactga aatgggttatg cctggcgaca acgtagaaat 780
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<210> 185

<211> 699

<212> DNA

<213> Staphylococcus epidermidis strain CSG 269

<400> 185

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tgggtgtacca gcattagttg tattcttaaa caaagttgac atggtagacg acgaagaatt 120
attagaatta gttgaaatgg aagttcgtga cttattaagc gaatatgact tcccaggtga 180
cgatgtacct gtaatcgctg gttctgcatt aaaagcatta gaaggcgatg ctgaatacga 240
acaaaaaatc ttagacttaa tgcaagcagt tgatgattac attccaactc cagaacgtga 300
ttctgacaaa ccattcatga tgccagttga ggacgtattc tcaatcactg gtcgtggtac 360
tgttgctaca ggccgtggtg aacgtggtca aatcaaagtt ggtgaagaag ttgaaatcat 420
cggtagtcac gaaacttcta aaacaactgt tactggtgta gaaatgttcc gttaaattatt 480
agactacgct gaagctggtg acaacatcgg tgctttatta cgtggtggtg cacgtgaaga 540
cgtacaacgt ggtcaagtat tagctgctcc tggttctatt acaccacaca caaaattcaa 600
agctgaagta tacgtattat ctaaagatga aggtggacgt cacactccat tcttcactaa 660
ctatcgccca caattctatt tccgtactac tgacgtaac 699
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<210> 186

<211> 829

<212> DNA

<213> Staphylococcus haemolyticus ATCC 29970

<400> 186

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tcttttatca cgtaacgttg gtgtaccagc attagtagta ttcttaaata aagttgacat 120
tctttgacgat gaagaattat tagaattagt tgaaatggaa gtacgtgact tattatctga 180
atacgacttc ccaggtgacg atgtacctgt aatcgctggt tcagcattaa aagctttaga 240
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cactccattc ttcacaaact atcgtccaca attctatttc cgtactactg acgtaactgg 720
tggtgttaac ttaccagaag gtactgaaat gggttatgctt ggcgacaacg ttgaaatgac 780
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<210> 187

<211> 705

<212> DNA

<213> Staphylococcus warneri strain CSG 123

<400> 187

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cagcattaaa agcttttagaa ggcgacgaaa aatacgaaga aaaaatctta gaattaatgc 240
aagcagttga tgactacatt ccaactccag aacgtgattc tgacaaacca ttcattgatgc 300
cagttgagga cgtattctca atcactgggtc gtggtactgt tgctacaggc cgtggtgaac 360
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caactgttac tgggtgtagaa atgttccgta agttattaga ctacgctgaa gctggtgaca 480
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aagacgaagg tggacgtcac actccattct tcagtaacta ccgccacaa ttctatttcc 660
gtactactga cgtaactggc gttgttcaat taccagaagg tactg 705
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<210> 188

<211> 678

<212> DNA

<213> Staphylococcus haemolyticus strain CSG 23

<400> 188

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gcatgctca atacgaagaa aaaatcttag aattaatgca agcagttgat gattacattc 240
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tcaactggcg tgggtactgtt gctacaggtc gtgttgaacg tgggtcaaatc aaagtgggtg 360
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tggtccgtaa attattagac tacgctgaag ctggtgacaa catcgggtgct ttattacgtg 480
gtgttgctcg tgaagatgta caacgtgggtc aagtattagc tgctccagggt tcaattacac 540
ctcacacaaa attcaaagca gacgtatacg ttttatcaaa agatgaagggt ggacgtcata 600
ctccattctt cactaactat cgtccacaat tctatttccg tactactgac gtaactgggtg 660
ttgttaactt accagaag

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<210> 189

<211> 668

<212> DNA

<213> Staphylococcus haemolyticus strain CSG 33

<400> 189

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acctgtaatc gctgggttcag cattaaaagc tttagaaggc gatgctcaat acgaagaaaa 180
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cgctgaagct ggtgacaaca tcggtgcatt attacgtggg gttgctcgtg aagacgtaca 480
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cgtatacgtt ttatctaaag acgaagggtg acgtcacact ccattcttca caaactatcg 600
tccacaattc tatttccgta ctactgacgt aactgggtgt gttaaacttac cagaagggtac 660
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<210> 190

<211> 593

<212> DNA

<213> Staphylococcus haemolyticus strain CSG 8

<400> 190

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ttattatctg aatacgactt cccagggtgac gatgtacctg taatcgctgg ttcagcatta 120
aaagcttttag aaggcgatgc tcaatacgaa gaaaaaatct tagaattaat gcaagcagtt 180
gatgattaca ttccaactcc agaacgtgat tctgacaaac cattcatgat gccagttgag 240
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gcattattac gtgggtgttc tcgtgaagac gtacaacgtg gtcaagtatt agctgctcca 480
ggttcaatca cacctcacac aaaattttaa gcagacgtat acgttttatc taaagacgaa 540
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<210> 191

<211> 828

<212> DNA

<213> Staphylococcus hominis subsp. hominis ATCC 27844

<400> 191

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aatcactggg cgtgggtactg ttgctacagg ccgtgttgaa cgtgggtcaaa tcaaagttgg 420
tgaagaagtt gaaattattg gtatcaaaga aacttctaaa acaactgtta ctggtgtaga 480

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aatgttccgt	aaattattag	actacgctga	agctgggtgac	aacatcggtg	ctttattacg	540
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acctcacaca	aaattcaaag	cagacgtata	cgttttatca	aaagatgaag	gtggacgtca	660
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tggtgttaac	ttaccagaag	gtactgaaat	ggtaatgcct	ggtgacaacg	ttgaaatgac	780
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<210> 192

<211> 620

<212> DNA

<213> *Staphylococcus warneri* ATCC 35982

<400> 192

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gccgtggtga	acgtgggtcaa	atcaaagttg	gtgaagaagt	tgaaatcatc	ggtttacatg	420
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aagctgggtga	caacatcggt	gctttattac	gtgggtgttg	tcgtgaagac	gtacaacgtg	540
gtcaagtatt	agctgctcct	ggttcaatta	caccacatac	aaaattcaaa	gcggaagttt	600
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<210> 193

<211> 692

<212> DNA

<213> *Staphylococcus hominis* strain CSG 170

<400> 193

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acaggccgtg	ttgaacgtgg	tcaaatcaaa	gttgggtgaag	aagttgaaat	tattggtatc	360
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cgtgggtcaag	tattagctgc	tccaggttca	attacacctc	acacaaaatt	caaagcagac	540
gtatacgttt	tatcaaaaaga	tgaagggtgga	cgtcatactc	cattcttctc	taactatcgt	600
ccacaattct	atttccgtac	tactgacgta	actggtggtg	ttaacttacc	agaagggtact	660
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<210> 194

<211> 684

<212> DNA

<213> *Staphylococcus hominis* strain CSG 36

<400> 194

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tgaatacgac	ttcccaggtg	acgacgtacc	tgtaatcgct	ggttcagctt	taaaagcttt	180
agaaggcgat	gctcaatacg	aagaaaaaat	cttagaatta	atgcaagcag	ttgatgatta	240
tattccaact	ccagaacgtg	actctgataa	accattcatg	atgccagttg	aggacgtatt	300
ctcaatcact	ggtcgtggta	ctggttgctac	aggccgtggt	gaacgtggtc	aaatcaaagt	360
tggtgaagaa	gttgaaatta	ttggtatcaa	agaaacttct	aaaacaactg	ttactgggtg	420
agaaatgttc	cgtaaattat	tagactacgc	tgaagctgg	gacaacatcg	gtgctttatt	480
acgtgggtgtt	gctcgtgaag	atgtacaacg	tggtcaagta	ttagctgctc	caggttcaat	540
tacacctcac	acaaaattca	aagcagacgt	atacgtttta	tcaaaagatg	aaggtggacg	600
tcatactcca	ttcttctcta	actatcgctc	acaattctat	ttccgtacta	ctgacgtaac	660
tggtgtgtgtt	aacttaccag	aagg				684

<210> 195
 <211> 685
 <212> DNA
 <213> *Staphylococcus hominis* strain CSG 6

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<400> 195
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attagttgaa atggaagtac gtgacttatt atctgaatac gacttcccag gtgacgacgt 120
acctgtaatc gctgggttcag ctttaaaagc tttagaaggc gatgctcaat acgaagaaaa 180
aatcttagaa ttaatgcaag cagttgatga ttacattcca actccagaac gtgactctga 240
taaaccattc atgatgccag ttgaggacgt attctcaatc actggtcgtg gtactgttgc 300
tacaggccgt gttgaacgtg gtcaaatcaa agttgggtgaa gaagttgaaa ttattggtat 360
caaagaaact tctaaaacaa ctgttactgg tgtagaaatg ttccgtaaat tattagacta 420
cgctgaagct ggtgacaaca tcggtgcttt attacgtggt gttgctcgtg aagatgtaca 480
acgtgggtcaa gtattagctg ctccagggtt aattacacct cacacaaaaa tcaaagcaga 540
cgtatacgtt ttatcaaaaag atgaagggtg acgtcatact ccattcttca ctaactatcg 600
tccacaattc tatttccgta ctactgacgt aactggtggt gttaacttac cagaaggtag 660
tgaaatggta atgcctggcg acaac                                     685
```

<210> 196
 <211> 611
 <212> DNA
 <213> *Staphylococcus hominis* strain CSG 62

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<400> 196
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ttaaaagctt tagaaggcga tgctcaatac gaagaaaaaa tcttagaatt aatgcaagca 120
gttgatgatt acattccaac tccagaacgt gactctgata aaccattcat gatgccaggt 180
gaggacgtat tctcaatcac tggctcgtgt agttgaaatt attggtatca aagatacttc taaaacaact 300
caaatcaaag ttggtgaaga agttgaaatt ttagactacg ctgaagctgg tgacaacatc 360
gttactgggt tagaatgtt ccgtaaaatta ttagactacg ctgaagctgg tgacaacatc 420
ggtgctttat tacgtgggtg tgctcgtgaa gatgtacaac gtgggtcaag attagctgct 480
ccaggttcaa tcacacctca cacaaaaatt aaagcagacg tatatgtttt atcaaaagat 540
gaaggtggac gtcatactcc attcttccact aactatcgtc cacaattcta tttccgtact 600
actgacgtaa ctgggtgtgt taacttacca gaaggtactg aaatggtaat gcctggcgac 611
aacgttgaaa t
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<210> 197
 <211> 828
 <212> DNA
 <213> *Staphylococcus lugdunensis* ATCC 43809

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<400> 197
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tcttttatca cgtaacgttg gtgtgccagc attagtagta ttcttaaaca aagttgacat 120
ggttgacgat gaagaattat tagaattagt agaaatggaa gttcgtgatt tattaactga 180
atatgacttc ccagggtgacg atgtgcctgt aatcgctggt tcagcattaa aagctttaga 240
aggcgacgaa aaatacgaag ctaaaatctt agaattaatg gatgcagttg ataactacat 300
tccaactcca gaacgtgact ctgacaaacc attcatgatg ccagttgagg acgtattctc 360
aatcactggg cgtgggtactg ttgctacagg ccgtggtgaa cgtgggtcaa tcaaagtcgg 420
tgaagaagtt gaaattattg gtatccacga tactactaaa acaactgtta ctgggtgtaga 480
aatgttccgt aaattattag actacgctga agctgggtgac aacatcggtg cgttattacg 540
tggtgttgct cgtgaagatg tacaacgtgg acaagtatta gctgctccag gttcaattac 600
acctcacact aaattttaaag ctgacgtata tgttttatct aaagatgaag gtggacgtca 660
tacaccattc ttctcaaaact accgcccaca attctatttc cgtactacag acgtaactgg 720
tggtgttaac ttaccagaag gtacagaaat ggttatgcct ggcgacaacg ttgaaatgac 780
agttgaatta atcgtctcaa tcgctatcga agacggaact cgtttctc 828
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<210> 198
 <211> 690
 <212> DNA
 <213> *Staphylococcus saprophyticus* ATCC 35552

<400> 198
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agaattatta gaattagtag aaatggaagt tcgtgactta ttaagcgaat atgacttccc 180
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acgtgattct gacaaacat tcatgatgcc agttgaggac gtattctcaa tcaactggtc 360
tggtactggt gctacaggcc gtgttgaacg tgggtcaaac aaagtcgggtg aagaaatcga 420
aatcatcggt atgcaagaag aatcaagcaa aacaactggt actggtgtag aaatgttccg 480
taaattatta gactacgctg aagctggtga caacattggt gcattattac gtggtgttcc 540
acgtgatgac gtacaacgtg gtcaagtttt agctgctcct ggtactatta caccacatac 600
aaaattcaaa gcggatgttt acgtttttatc taaagatgaa ggtgggtcgtc atacaccatt 660
cttcactaac taccgcccac aattctattt 690

<210> 199

<211> 723

<212> DNA

<213> Staphylococcus saprophyticus strain CSG 83

<400> 199
gcattagttg tattctttaa caaagttgac atgggtgacg atgaagaatt attagaatta 60
gtagaaatgg aagttcgtga tttattaagc gaatatgact tcccagggtga cgatgtacct 120
gtaattctctg gttctgcatt aaaagcttta gaaggcgacg ctgactatga gcaaaaaatc 180
ttagacttaa tgcaagctgt tgatgacttc attccaacac cagaacgtga ttctgacaaa 240
ccattcatga tgccagttga ggacgtattc tcaatcactg gtcgtggtag tgttgctaca 300
ggcgtggtg aacgtggtca aatcaaagtc ggtgaagaaa tcgaaatcat cgggtatgcaa 360
gaagaatcaa gcaaaacaac tgttactggg ttagaaatgt tccgtaaatt attagactac 420
gctgaagctg gtgacaacat tgggtgcatta ttacgtgggtg tttcacgtga tgacgtacaa 480
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ccacaattct atttccgtac tactgacgta actggtggtg ttaacttacc agaaggtact 660
gaaatgggta tgcctggcga taacgttgaa atggatggtg aattaatttc tccaatcgct 720
att 723

<210> 200

<211> 697

<212> DNA

<213> Staphylococcus saprophyticus strain CSsa 18

<400> 200
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attattagaa ttagtagaaa tggaagttcg tgacttatta agcgaatatg acttcccagg 120
tgacgatgta cctgtaatct ctggttctgc attaaaagct ttagaaggcg acgctgacta 180
tgagcaaaaa atcttagact taatgcaagc tgttgatgac ttcatccaa caccagaacg 240
tgattctgac aaaccattca tgatgccagt tgaggacgta ttctcaatca ctggtcgtgg 300
tactgttgct acaggccgtg ttgaacgtgg tcaaatcaaa gtcggtgaag aaatcgaaat 360
catcggtatg caagaagaat caagcaaaa aactgttact ggtgtagaaa tgttccgtaa 420
attattagac tacgtgaag ctggtgacaa cattggtgca ttattacgtg gtgtttcacg 480
tgatgacgta caacgtgggtc aagtttttagc tgctcctggg actattacac cacatacaaa 540
attcaaaagc gatgtttacg ttttatctaa agatgaaggt ggtcgtcata caccattctt 600
cactaactac cgcccacaat tctatttccg tactactgac gtaactggtg ttgttaactt 660
accagaaggt actgaaatgg ttatgcctgg cgataac 697

<210> 201

<211> 835

<212> DNA

<213> Staphylococcus sciuri subsp. sciuri ATCC 29060

<400> 201
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gggtgacgat gaagaattat tagaattagt tgaaatggaa gttcgtgact tattatctga 180
atatgacttc ccaggcgacg acgttcctgt aattgctggg tcagcattaa aagcattaga 240


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aggcgacgaa gcttacgaag acaaaatcat ggaattaatg gatgctgttg atacattcat 300
cccaactcca gaacgtgact ctgacaaacc attcatgatg ccagttgagg acgtattctc 360
aatcactggg cgtggtactg ttgctacagg ccgtgttgaa cgtggtcaaa tctactgttg 420
tgaagaagtt gaaatcatcg gtttaactga agaactcttct aaaacaactg taactgggtg 480
tgaaatgttc cgtaaattat tagacttcgc tgaagctgga gataacatcg gtgcattatt 540
acgtggtggt gctcgtgaag acgttaaccg tggtaagta ttagctaaac caggttcaat 600
cacacctcac actaaattca aagctgaagt ttatgtatta tctaaagacg aaggtggacg 660
tcatactcca ttcttcacaa actaccgcc acaattctat ttccgtacta ctgacgtaac 720
tggtgtagtt aacttaccag aaggtactga aatggttatg cctggcgaca acgttgaaat 780
ggacgttgaa ttaatttcac caatcgctat tgaagacggt atcgtttctc aatca 835

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<210> 202

<211> 831

<212> DNA

<213> *Staphylococcus warneri* ATCC 27836

<400> 202

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tcttttatca cgtaacgttg gtgtaccagc ttagttgta ttcttaaaca aagttgatat 120
ggtagacgac gaagaattat tagaattagt agaaatggaa gttcgtgact tattatctga 180
atatgacttc ccaggtgacg acgtacctgt aatcgctggg tcagcattaa aagctttaga 240
aggcgacgaa aaatacgaag aaaaaatctt agaattaatg caagcagttg atgactacat 300
tccaactcca gaacgtgatt ctgacaaacc attcatgatg ccagttgagg acgtattctc 360
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tgaagaagtt gaaatcatcg gtttacatga cacttctaaa acaactgtta ctggtgtaga 480
aatgttccgt aagttattag actacgctga agctggtgac aacatcggtg ctttattacg 540
tggtgttgct cgtgaagacg tacaacgtgg tcaagtatta gctgctcctg gttcaattac 600
accacataca aaattcaaag cggaagttta cgttttatct aaagacgaag gtggacgtca 660
cactccattc ttcagtaact accgcccaca attctatttc cgtactactg acgtaactgg 720
cgttggtcaa ttaccagaag gtactgaaat ggttatgcct ggtgataacg ttgaaatgac 780
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<210> 203

<211> 829

<212> DNA

<213> *Staphylococcus warneri* strain CSG 50

<400> 203

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ggtagacgac gaagaattat tagaattagt agaaatggaa gttcgtgact tattatctga 180
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tccaactcca gaacgtgatt ctgacaaacc attcatgatg ccagttgagg acgtattctc 360
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cactccattc ttcagtaact accgcccaca attctatttc cgtactactg acgtaactgg 720
cgttggtcaa ttaccagaag gtactgaaat ggttatgcct ggtgataacg ttgaaatgac 780
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<210> 204

<211> 839

<212> DNA

<213> *Bifidobacterium longum* ATCC 15707

<400> 204

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ggtcgacgat gaagagctca tcgagctcgt cgaagaagag gtccgcgacc tcctcgacga 180
gaacggcttc gaccgtgact gcccggtcat ccacacctcc gcttacgggtg ctctgcacga 240

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cgacgctccg gaccacgaga agtgggtcca gtccgttaag gacctcatgg acgctgtcga 300
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cgtcttcacc atctccggcc gtggtaccgt tgtcaccggt cgtgtcgagc gtggccagct 420
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cggccgtcac tcgccgttct tctccaaacta ccgtccgcag ttctacttcc gcaccaccga 720
cgtcaccggc gtcacgcagc tgccggaagg cgtcgagatg gttcagccgg gcgaccacgc 780
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<210> 205

<211> 754

<212> DNA

<213> *Stenotrophomonas maltophilia* strain CDC F3338

<400> 205

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cctgtgtgct cgccagggtcg gcgtgcccga catcgctcgt ttcctgaaca aggccgacat 120
ggtcgacgac gccgagctgc tcgagctggt cgagatggaa gtgcgcgaac tgcgtgagcaa 180
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gatcaagccg cacaccaagt tcgaaggcga agtgtacgtc ctgtcgaagg acgagggcgg 660
ccgccacacc ccgttcttca acggctaccg tccgcagttc tacttccgca ccaccgacat 720
caccggcgcc gctgcactgc cgaaggcgt cgaa 754

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<210> 206

<211> 835

<212> DNA

<213> *Streptococcus acidominimus* ATCC 51726

<400> 206

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tggtgatgat gaagaattgc ttgaattggt tgaaatggaa atccgtgacc ttctttcaga 180
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tccagaacca gaacgtgata ctgacaaacc attgcttctt ccagtcgagg atgtattctc 360
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caaccacac actaaattca aaggtgaagt ttacgttctt tctaaagaag aaggtggacg 660
tcacactcca ttcttcgata actaccgtcc tcagttctac ttccgtacaa ctgacgtaac 720
tggttcaatc aaattgccag aaggtactga aatggtaatg cctggtgata acgtaactat 780
cgaagttgag ttgatccacc caatcgccgt tgaacaagggt actactttct ctatc 835

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<210> 207

<211> 819

<212> DNA

<213> *Streptococcus agalactiae* ATCC 12403

<400> 207

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tttcacgtca agttgggtgt aaacacctta tcgtattcat gaacaaagtt gaccttggtg 120
atgatgaaga attgcttgaa ttgggttgaaa tggaaattcg tgaccttctt tcagaatacg 180
acttcccagg tgatgacctt ccagttatcc aaggttcagc tcttaaagca cttgaaggcg 240
acgaaaaata cgaagacatc atcatggaat tgatgagcac tgttgatgag tacattccag 300

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aaccagaacg	tgatactgac	aaacctttac	ttcttccagt	tgaagatgta	ttctcaatca	360
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aagttgaaat	cgttggtatt	aaagaagata	tccaaaaagc	agttgttact	ggtgttgaaa	480
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cacacactaa	atttaaagggt	gaagtttaca	tcctttctaa	agaagaagggt	ggacgtcata	660
ctccattctt	caacaactac	cgtccacaat	tctacttccg	tacaactgac	gtaacagggt	720
caatcgaact	tccagcagga	acagaaatgg	ttatgcctgg	tgataacggt	actatcgaag	780
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<210> 208

<211> 819

<212> DNA

<213> Streptococcus agalactiae ATCC 12973

<400> 208

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aagttgaaat	cgttggtatt	aaagaagata	tccaaaaagc	agttgttact	ggtgttgaaa	480
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cacacactaa	atttaaagggt	gaagtttaca	tcctttctaa	agaagaagggt	ggacgtcata	660
ctccattctt	caacaactac	cgtccacaat	tctacttccg	tacaactgac	gtaacagggt	720
caatcgaact	tccagcagga	acagaaatgg	ttatgcctgg	tgataacggt	actatcgaag	780
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<210> 209

<211> 822

<212> DNA

<213> Streptococcus agalactiae ATCC 13813

<400> 209

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tgatgatgaa	gaattgcttg	aattgggtga	aatggaaatt	cgtgaccttc	tttcagaata	180
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agaaccagaa	cgtgatactg	acaaaccttt	acttcttcca	gtcgaagatg	tattctcaat	360
cactggacgt	ggtacagttg	cttcaggacg	tatcgaccgt	ggtactgttc	gtgtcaacga	420
cgaagttgaa	atcgttggtg	ttaaagaaga	tatccaaaaa	gcagttgtta	ctgggtgttg	480
aatgtttccg	aaacaacttg	acgaaggtct	tcgaggggac	aacgttggtg	ttcttcttcg	540
tggtgttcaa	cgtgatgaaa	tcgaacgtgg	tcaagttcct	gctaaaccag	gttcaatcaa	600
cccacacact	aaatttaaag	gtgaagttta	cattctttct	aaagaagaag	gtggacgtca	660
tactccattc	ttcaacaact	accgtccaca	attctacttc	cgtacaactg	acgtaacagg	720
ttcaatcgaa	cttccagcag	gaacagaaat	ggttatgcct	ggtgataacg	ttactatcga	780
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<210> 210

<211> 825

<212> DNA

<213> Streptococcus agalactiae strain CDCss-1073

<400> 210

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ccttctttca	cgtcaagttg	gtgttaaaca	ccttatcgta	ttcatgaaca	aagttgacct	120
tgttgatgat	gaagaattgc	ttgaattggt	tgaaattggaa	attcgtgacc	ttctttcaga	180
atacgacttc	ccaggtgatg	accttccagt	tatccaaggt	tcagctctta	aagcacttga	240
aggcgacgaa	aaatacgaag	acatcatcat	ggaattgatg	agcactgttg	atgagtacat	300

tccagaacca	gaacgtgata	ctgacaaacc	tttacttctt	ccagttgaag	atgtattctc	360
aatcactgga	cgtggtacag	ttgcttcagg	acgtatcgac	cgtggtactg	ttcgtgtcaa	420
cgacgaagtt	gaaatcgttg	gtattaaaga	agatatccaa	aaagcagttg	ttactggtgt	480
tgaaatgttc	cgtaaacaac	ttgacgaagg	tcttgccagg	gacaacgttg	gtgttcttct	540
tcggtggtgt	caacgtgatg	aaatcgaacg	tgggtcaagtt	cttgctaaac	caggttcaat	600
caaccacac	actaaattta	aaggtgaagt	ttacatcctt	tctaaagaag	aaggtggacg	660
tcatactcca	ttcttcaaca	actaccgtcc	acaattctac	ttccgtacaa	ctgacgtaac	720
aggttcaatc	gaacttccag	caggaacaga	aatgggttatg	cctggtgata	acgttactat	780
cgaagttgaa	ttgattcacc	caatcgccgt	agaacaaggt	actac		825

<210> 211

<211> 826

<212> DNA

<213> Streptococcus anginosus ATCC 33397

<400> 211

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ggtgacgatg	aagaattgct	tgaattgggt	gaaatggaaa	tccgtgacct	tctttcagaa	180
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ccagaaccag	aacgtgacac	tgacaaacca	ttgcttcttc	cagttgaaga	tgtattctca	360
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cgtggtatcc	aacgtgacga	aatcgaacgt	ggacaagttc	ttgctaaacc	aggttcaatt	600
catccacaca	ctaaattcaa	aggtgaagtt	tacatcctta	ctaaagaaga	aggtggacgt	660
catactccat	tcttcaacaa	ctaccgtcct	caattctact	tccgtactac	agacgttaca	720
ggttcaatcg	aacttcctgc	aggtactgaa	atggtaatgc	ctggtgataa	cgtacaacatc	780
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<210> 212

<211> 827

<212> DNA

<213> Streptococcus bovis ATCC 33317

<400> 212

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tggtgatgac	gaagaattgc	ttgaattggg	tgaatggaaa	atccgtgacc	ttctttcaga	180
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aggtagacct	cactacgaag	acatcatcat	ggaattgatg	aacactgtag	atgaatacat	300
tccagaacca	aaacgtgata	ctgacaaacc	attgcttctt	ccagtcgaag	acgtattctc	360
aatcactggg	cgtggtactg	tagcatcagg	acgtatcgac	cgtggtactg	ttaaagtcaa	420
cgacgaagtt	gaaatcgttg	gtatccgtga	cgacatccaa	aaagctgttg	ttactggtgt	480
tgaaatgttc	cgtaaacaac	ttgatgaagg	tatcgccagg	gataacgttg	gtgttcttct	540
tcggtggtatc	caacgtgatg	aaatcgaacg	tggtcaagtt	cttgctaaac	caggttcaat	600
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aggttcaatc	gaacttccag	caggtactga	aatggtaatg	cctggtgata	acgttactat	780
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<210> 213

<211> 821

<212> DNA

<213> Streptococcus anginosus ATCC 27823

<400> 213

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gacgatgaag	aattgcttga	attgggttga	atggaaatcc	gtgaccttct	ttcagaatac	180
gatttcccag	gtgatgaaat	cccagttatc	caaggttcag	ctcttaaagc	tcttgaaggt	240
gatgaaaaat	atgaagacat	catcatggaa	ttgatggata	ctgttgatga	atacattcca	300

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gaaccagaac  gtgacactga  caaaccactt  cttcttccag  tcgaagatgt  attctcaatc  360
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gaagttgaaa  ttgttggtat  tcgtgacgaa  atccaaaaag  cagttgttac  tgggtgtgaa  480
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ggtatccaac  gtgacgaaat  cgaacgtgga  caagttcttg  ctaaaccagg  ttcaattcat  600
ccacacacta  aattcaaagg  tgaagtttac  atccttacta  aagaagaagg  tggacgtcat  660
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tcaatcgaac  ttctgcagg  tactgaaatg  gtaatgcctg  gtgataacgt  aacaattgat  780
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<210> 214

<211> 821

<212> DNA

<213> *Streptococcus cricetus* ATCC 19642

<400> 214

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gaagttgaaa  tcgttggtat  caaggacgaa  atccaaaaag  cggttgttac  cggagttgaa  480
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ggtatccaac  gtgatgaaat  cgaacgtggg  caagtattgg  ctgcacctgg  ttcaatccat  600
ccacacacta  aattcaagg  tgaagtttac  atcctttcta  aagatgaagg  tggacgtcac  660
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<210> 215

<211> 821

<212> DNA

<213> *Streptococcus cristatus* ATCC 51100

<400> 215

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tgacgaagaa  ttgcttgaat  tggttgaaat  ggaaatccgt  gacctcttgt  cagaatacga  180
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aatcgaactt  ccagcaggta  ctgaaatggg  aatgcctggt  gataacgtaa  ctatcgacgt  780
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<210> 216

<211> 792

<212> DNA

<213> *Streptococcus downei* ATCC 33748

<400> 216

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attgcttgaa  ttggttgaaa  tggaaatccg  tgacctgctt  tcagaatacg  atttcccagg  180
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tgatactgat aagcctttgc ttcttccagt cgaagatgta ttctcaatca ctggacgtgg 360
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cgttgggtatc aaggacgaaa tccaaaaagc agttgttacc ggagttgaaa tgttccgtaa 480
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gtttaaaggt gaagtttaca tcctttctaa agaagaaggt ggacgtcata ctccattctt 660
taacaactac cgtccacagt tctacttccg tacaactgac gtaactgggt caatcgaatt 720
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<210> 217
 <211> 795
 <212> DNA
 <213> *Streptococcus dysgalactiae* ATCC 43078

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<400> 217
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ttcaacaact atcgtccaca attctacttc cgtacaactg acgtaacagg ttcaatcgaa 720
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<210> 218
 <211> 828
 <212> DNA
 <213> *Streptococcus equi* subsp. *equi* ATCC 9528

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<400> 218
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tcacacacca ttcttcaaca actatcgtcc acaattctac ttccgtacta ctgacgtaac 720
aggttcaatc gagcttccag caggtacaga aatgggttatg cctggtgata acgtgactat 780
tgacgttgag ttgatccacc caatcgccgt agaacaaggt actacatt 828

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<210> 219
 <211> 825
 <212> DNA
 <213> *Streptococcus ferus* ATCC 33477

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atatgatttc ccagggtgatg accttccagt tatccaaggt tcagctctta aagcgttga 240
aggtgatact gctcaagaag atgttatcat ggaattgatg aaaaccgttg atgagtacat 300

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cccagaacca	gaacgtgata	ctgacaaaacc	attgcttctt	ccagtcgaag	atgtattctc	360
aatcacaggt	cgtggtactg	tagcttcagg	acgtatcgat	cgtggtactg	taagagtcaa	420
cgatgaagtt	gaaatcgttg	gtatcaaaga	cgaaatcact	aaagcagttg	ttaccggtgt	480
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tgggttcaatc	gaattgccag	caggtactga	aatggttatg	cctgggtgata	acgtgactat	780
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<210> 220

<211> 826

<212> DNA

<213> Streptococcus gordonii ATCC 10558

<400> 220

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<210> 221

<211> 799

<212> DNA

<213> Streptococcus anginosus ATCC 27335

<400> 221

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<210> 222

<211> 825

<212> DNA

<213> Streptococcus macacae ATCC 35911

<400> 222

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cccagaacca	caacgtgata	ctgacaagcc	attgcttctt	ccagtcgaag	atgttttctc	360
tattactgga	cgtggtactg	ttgcttcagg	acgtattgac	cgtggtactg	ttaagggtta	420
tgatgaagtt	gaaatcggtg	gtattcgtga	cgatattcaa	aaagcagttg	ttactggtgt	480
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<210> 223

<211> 822

<212> DNA

<213> *Streptococcus gordonii* ATCC 33399

<400> 223

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acactaaata	cgaagacatc	ggttatggaat	tgatgaacac	agttgatgag	tacatcccag	300
aaccagaacg	tgacactgac	aaaccattgc	ttcttccagt	cgaagacgta	ttctcaatca	360
ctggtcgtgg	tacagttgct	tcaggacgta	tcgaccgtgg	tatcggtaaa	gtcaacgacg	420
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cacacactaa	attcaaagggt	gaagttttaca	tccttactaa	agaagaagggt	ggacgtcaca	660
ctccattctt	caacaactac	cgtccacaat	tctacttccg	tactactgac	gttacagggt	720
caatcgaaat	tccagcagggt	actgaaatgg	taatgcctgg	tgataacgtg	acaatcgacg	780
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<210> 224

<211> 827

<212> DNA

<213> *Streptococcus mutans* ATCC 25175

<400> 224

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cattcttctt	tcacgtcaag	ttggtgttaa	atacctcatt	gtcttcatga	ataaagttga	120
tttggttgac	gatgaagaat	tgcttgaatt	ggttgaaatg	gaaatccgtg	atcttcttct	180
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tgaaggcgtat	actgctcaag	aagatatcat	catggaatta	atgcatactg	ttgatgacta	300
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aattcaccca	cataactaaat	tcaaagggtga	agtttatatc	cttactaaag	aggaagggtg	660
acgtcataca	ccattcttca	ataactatcg	tccacaattc	tacttccgta	caactgacgt	720
aactggttca	attgagttgc	cagcagggtac	tgaatgggtt	atgcctggtg	ataacgtttac	780
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<210> 225

<211> 824

<212> DNA

<213> *Streptococcus parasanguinis* ATCC 15912

<400> 225

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tgatgatgaa	gaattgcttg	aattggttga	aatggaaatc	cgtgaccttc	tttcagaata	180
cgatttccca	ggtgatgacc	ttccagttat	ccaaggttca	gctcttaaag	ctcttgaagg	240
tgactctaaa	tatgaagata	tcattcatgga	attgatggat	actgttgatg	agtacatccc	300

agaaccagaa	cgcgatactg	acaaaccatt	gcttcttcca	gtcgaagacg	tattctcaat	360
cactggacgt	ggtacagttg	cttcaggacg	tatcgaccgt	ggtggtgttc	gtgtcaatga	420
tgaaatcgaa	atcggttgga	tcaaagaaga	aatccaaaaa	gcagttgtta	ctggtgttga	480
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cccacacact	aaattcaaag	gtgaagttta	catccttact	aaagaagaag	gtggacgtca	660
tactccattc	ttcaacaact	accgtccaca	gttctacttc	cgtacaactg	acgtaactgg	720
atctatcgaa	cttccaccag	gaactgaaat	ggtaatgcct	ggtgataacg	tgactatcga	780
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<210> 226

<211> 824

<212> DNA

<213> *Streptococcus ratti* ATCC 19645

<400> 226

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ggttgatgat	gaagaattgc	ttgaattggt	tgaatggaa	atccgtgatc	ttctttcaga	180
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aggtgacact	gaacaagaag	atgttatcat	ggaattgatg	aaaacagttg	atgagtacat	300
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aatcactgga	cgtggtactg	ttgcatcagg	acgtatcgac	cgtggtactg	ttaaagtcaa	420
tgacgaagtt	gaaatcgttg	gtatccgtga	tgacatccaa	aaagctggtg	ttactggtgt	480
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tcgtggatc	caacgtgatg	aaatcgaaacg	cgttcaagtt	cttgctaaac	caggttcaat	600
tcacccgcat	actaaattta	aagggtgaagt	ttacatcctt	actaaagaag	aaggcggacg	660
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tggttcaatc	gaattgccag	caggtactga	aatgggttatg	cctgggtgata	acgtgactat	780
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<210> 227

<211> 795

<212> DNA

<213> *Streptococcus sanguinis* ATCC 10556

<400> 227

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agaattgctt	gaattgggtg	aaatggaaat	ccgtgacctc	ttgtcagaat	acgacttccc	180
aggtgacgat	cttccagtta	tccaaggttc	agctcttaaa	gctcttgaag	gtgactctaa	240
atatgaagac	atcatcatgg	aattgatgga	cactgttgat	gagtacatcc	cagaaccaga	300
acgcgatact	gacaagccat	tgcttcttcc	agtcgaagac	gtattctcaa	tcactggctc	360
tggtacagtt	gtttcaggac	gtatcgaccg	tggtatcggt	aaagtcaacg	acgaaatcga	420
aatcggttgg	atcaaagaag	aaatccaaaa	agcagttggt	actggtggtg	aaatgttccg	480
taaacagctt	gacgaaggtc	ttgcagggga	caacgtagggt	gtgcttctcc	gtggtatcca	540
acgtgatgaa	atcgaacgtg	gacaagttat	cgctaaacca	gggtcaatca	acccacacac	600
taaattcaag	ggtgaagttt	atatccttac	taaagaagaa	ggcggacgtc	acactccatt	660
cttcaacaac	taccgtccac	agttctactt	ccgtacaact	gacgttacag	gttcaatcga	720
acttccagca	ggtactgaaa	tggtaatgcc	tggtgataac	gtaacaatcg	acgttgagtt	780
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<210> 228

<211> 795

<212> DNA

<213> *Streptococcus sobrinus* ATCC 33478

<400> 228

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agaattgctt	gaattgggtg	aaatggaaat	ccgtgatctt	ctttcagaat	acgatttccc	180
aggtgacgac	attcctgttg	ttcaaggttc	agctcttaag	gctcttgaag	gtgatacagc	240
tgccgaagac	aagattatgg	aattgatgga	catcgttgat	gattacattc	cagaaccaa	300

acgcgatact	gataagccat	tgcttctccc	agtcgaagac	gtatttctcaa	tcactgggtcg	360
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aatcggttgg	atccgtgacg	atatccaaaa	agcagttggt	actggagttg	aaatgttccg	480
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cttcaacaac	taccgtccac	agttctactt	ccgtacaact	gacgtaactg	gttcaatcga	720
attgccagca	ggtactgaaa	tggttatgcc	tggtgataac	gttactatcg	acgttgaatt	780
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<210> 229

<211> 797

<212> DNA

<213> *Streptococcus suis* ATCC 43765

<400> 229

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agaattgctt	gagttgggtg	aaatggaaat	ccgtgacctt	ctttcagaat	acgatttccc	180
aggtgatgat	cttccagtta	tccaagggtt	agctcttaaa	gctcttgaag	gtgactctaa	240
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taaacaactt	gacgaagggtc	ttgccggcga	taacgttgggt	gtgcttcttc	gtgggtgata	540
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attgccagaa	ggtactgaaa	tggtaatgcc	tggtgataac	gttactatcg	acgttgaatt	780
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<210> 230

<211> 793

<212> DNA

<213> *Streptococcus uberis* ATCC 19436

<400> 230

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<210> 231

<211> 798

<212> DNA

<213> *Streptococcus vestibularis* ATCC 49124

<400> 231

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aagaattgct	tgaattgggt	gaaatggaaa	tccgtgacct	tctttcagaa	tacgatttcc	180
caggtgatga	tattccagtt	atccaagggt	cagctcttaa	agctcttgaa	ggtgattcta	240
aatacgaaga	catcatcatg	gacttgatga	acactgttga	cgaatacatt	ccagaaccag	300

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<210> 232
 <211> 829
 <212> DNA
 <213> *Tatumella ptyseos* ATCC 33301

<400> 232						
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<210> 233
 <211> 829
 <212> DNA
 <213> *Trabulsiella guamensis* ATCC 49490

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gaagaagtag	aaatcggttg	tatcaaagag	actgcgaagt	caacctgtac	tggcgtagaa	480
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<210> 234
 <211> 825
 <212> DNA
 <213> *Veillonella parvula* ATCC 10790

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<210> 235
 <211> 825
 <212> DNA
 <213> *Yersinia enterocolitica* ATCC 9610

<400> 235						
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agaaccagag	cgtgctatcg	ataagccgtt	cctgctgcca	atcgaagacg	tattctctat	360
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agaagtcgaa	attgttggcc	tgaagatac	cgtaaatact	acttgactcg	gcgttgaaat	480
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<210> 236
 <211> 828
 <212> DNA
 <213> *Yersinia frederiksenii* ATCC 33641

<400> 236						
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gttgacgacg	aagagctgct	ggaactggta	gaaatggaag	ttcgtgaact	tctgtctcag	180
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gaagaagtcg	aaatcggttg	tatcattgat	accatcaaga	ctacctgtac	tggtgttgaa	480
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ccacacacca	aatttgaatc	agaagtttat	attctgagca	aagatgaagg	tggtcgccat	660
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gttaacctga	ttgctcctat	cgcaatggat	gacggtctgc	gctttgcg		828

<210> 237
 <211> 813
 <212> DNA
 <213> *Yersinia intermedia* ATCC 29909

<400> 237						
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attgccagac	ggcgttgaga	tggtgatgcc	aggtgataac	attcaaatga	ttgttaacct	780
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<210> 238

<211> 829

<212> DNA

<213> *Yersinia pestis* strain KIM D27

<400> 238

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<210> 239

<211> 817

<212> DNA

<213> *Yersinia pseudotuberculosis* ATCC 29833

<400> 239

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<210> 240

<211> 829

<212> DNA

<213> *Yersinia rohdei* ATCC 43380

<400> 240

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gccgcatacc	aaatttgagt	cagaagttta	tattctgagc	aaagatgaag	gtggctcgtca	660
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taccatcgaa	ctgccagacg	gtgttgagat	ggatgatgcca	ggtgataaca	ttcaaattgat	780
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<210> 241

<211> 804

<212> DNA

<213> Yokenella regensburgei ATCC 35313

<400> 241

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<210> 242

<211> 849

<212> DNA

<213> Achromobacter xylosoxidans subsp. denitrificans ATCC 15173

<400> 242

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<210> 243

<211> 787

<212> DNA

<213> Acinetobacter baumannii ATCC 19606

<400> 243

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<210> 244
 <211> 825
 <212> DNA
 <213> Acinetobacter lwoffii strain CDCF 3697

<400> 244						
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ctaggtcgta	tgccgtctgc	agtaggttac	caaccgacac	ttgcagaaga	gatgggtggt	780
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<210> 245
 <211> 837
 <212> DNA
 <213> Staphylococcus saprophyticus strain CSG 197

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<210> 246
 <211> 851
 <212> DNA
 <213> Alcaligenes faecalis ATCC 15554

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<210> 247

<211> 846

<212> DNA

<213> *Bacillus anthracis* strain 4229

<400> 247

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acagttgcaa	tgtcttcac	agatggactt	gttcgtggca	cagaagtaga	agatactggt	180
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<210> 248

<211> 810

<212> DNA

<213> *Bacillus cereus* ATCC 14579

<400> 248

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gtacttctgt	tcacogataa	catcttccgt	ttcacgcaag	cgggttctga	agtatctgcc	720
cttcttggtc	gtatgccatc	tgcggtaggt	taccaacca	cacttgcaac	agaaatgggt	780
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<210> 249

<211> 944

<212> DNA

<213> *Bacteroides distasonis* ATCC 8503

<400> 249

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<210> 250

<211> 939

<212> DNA

<213> Bacteroides ovatus ATCC 8483

<400> 250

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<210> 251

<211> 833

<212> DNA

<213> Leclercia adecarboxylata ATCC 23216

<400> 251

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<210> 252

<211> 819

<212> DNA

<213> Stenotrophomonas maltophilia CDC F3338

<400> 252

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<210> 253

<211> 864

<212> DNA

<213> Bartonella henselae ATCC 49882

<400> 253

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<210> 254

<211> 866

<212> DNA

<213> Bifidobacterium adolescentis ATCC 15703

<400> 254

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<210> 255

<211> 842

<212> DNA

<213> *Brucella abortus* strain S2308

<400> 255

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cg						842

<210> 256

<211> 833

<212> DNA

<213> *Cedecea davisae* ATCC 33431

<400> 256

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<210> 257

<211> 829

<212> DNA

<213> *Cedecea lapagei* ATCC 33432

<400> 257

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<210> 258

<211> 830

<212> DNA

<213> *Cedecea neteri* ATCC 33855

<400> 258

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<210> 259

<211> 931

<212> DNA

<213> *Chryseobacterium meningosepticum* strain CDC B7681

<400> 259

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<210> 260

<211> 726

<212> DNA

<213> *Citrobacter amalonaticus* ATCC 25405

<400> 260

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<210> 261

<211> 812
<212> DNA
<213> *Citrobacter braakii* ATCC 43162

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<210> 262
<211> 811
<212> DNA
<213> *Citrobacter koseri* ATCC 27156

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<210> 263
<211> 816
<212> DNA
<213> *Citrobacter farmeri* ATCC 51112

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ttcgtcgata acatctatcg ttacaccctg gccggtacgg aagtatccgc actgctgggc 720
cgtatgccat cagcggtagg ctaccagcca accctggcgg aagagatggg tgttctgcag 780
gaacgtatca cttctaccaa aaccggttct attacc 816

<210> 264

<211> 819
 <212> DNA
 <213> *Citrobacter freundii* ATCC 8090

<400> 264
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 ctgacggtct gcgtcgtggt ctggaagtta aagacctcga gcacccgatc gaagtcccgg 180
 taggtaaaagc aacgctgggt cgtatcatga acgttctggg tcacccgatc gacatgaaag 240
 gcgatatcgg tgaagaagag cgttggggta tccaccgtgc agcaccttcc tacgaagagc 300
 tgtcaagctc tcaggaactg ctggaaaccg gtatcaaagt tatcgacctg atgtgtccgt 360
 tcgctaaggg cggtaaagtt ggtctgttcg gtgggtgcggg tgtaggtaaa accgtaaaca 420
 tgatggagct gatccgtaac atcgcgatcg aacactccgg ttactccgtg tttgcgggcg 480
 taggtgaacg tactcgtgag ggtaacgact tctaccacga aatgaccgac tccaacgttc 540
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 ttgcgctgac cggctctgacc atggctgaga agttccgtga cgaaggctcg gacgttctgc 660
 tgttcgttga taacatctat cgttacaccc tggccgggtac agaagtatct gactgtctgg 720
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<210> 265
 <211> 822
 <212> DNA
 <213> *Citrobacter koseri* ATCC 27028

<400> 265
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 gacggcctgc gtcgtgggtc ggatgtgaaa gaccttgagc acccgatcga agtcccggta 180
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 gagatcgggtg aagaagagcg ttgggctatc caccgtgcgg caccgtccta cgaagagttg 300
 tcaaactctc aggaactggt ggaaaccggt atcaaagtta tcgacctgat gtgtccggtc 360
 gcgaagggcg gtaaagtggg tctgttcggt ggtgcggggtg taggtaaaac cgtaaacatg 420
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 ggtgaacgta ctcgtagagg taacgacttc taccacgaaa tgaccgactc caacgttatc 540
 gacaaagtat ccttggttta cggccagatg aacgagccgc cgggaaaccg tctgcgcgtt 600
 gcgctgaccg gcctgaccat ggccgagaaa ttccgtgacg aaggtcgtga cgttctgctg 660
 ttcgtcgaca acatctaccg ttacaccctg gccggtacgg aagtatccgc actgctgggt 720
 cgtatgcctt cagcggtagg ttaccagcgg accctggcgg aagagatggg tgttttgcag 780
 gaacgtatca cctccaccaa aaccggttct atcacctccg ta 822

<210> 266
 <211> 820
 <212> DNA
 <213> *Citrobacter sedlakii* ATCC 51115

<400> 266
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 gacggctctgc gtcgtgggtc ggaagtataa gaccttgagc acccgatcga agtcccggta 180
 ggtaaagcaa cgctgggtcg tatcatgaac gtactgggcg aaccagtaga catgaaaggc 240
 gacatcgggtg aagaagagcg ttgggctatc caccgtgccg cgccgtccta tgaagagttg 300
 tctaactctc aggaactgct ggaaaccggc atcaaagtta tcgacctgat gtgtccggtc 360
 gcgaagggcg gtaaagtcgg tctgttcggt ggtgcgggcg taggtaaaac cgtaaacatg 420
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 ggtgaacgta ctcgtagagg taacgacttc taccacgaaa tgaccgactc caacgttatc 540
 gacaaagtat ccttggtgta cggccagatg aacgagccgc ctggaaaccg tctgcgcgtc 600
 gactgaccg gtctgaccat ggctgagaag ttccgtgacg aaggtcgtga cgttctgctg 660
 ttcgtcgata acatctatcg ttacaccctg gccggtacgg aagtatccgc actgctgggt 720
 cgtatgcctt cagcggtagg ttatcagccg actctggcgg aagagatggg tgttctgcag 780
 gaacgtatca cctcaaccaa aaccggttct atcacctccg 820

<210> 267

<211> 806
<212> DNA
<213> *Citrobacter werkmanii* ATCC 51114

<400> 267
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ggtctgcgtc gtggtctgga agttaaagac cttagcacc cgatcgaagt cccggtaggt 180
aaagcaaccc tgggtcgtat catgaacgtc ctgggtcatc cgatcgacat gaaaggcgat 240
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ctgaccggtc tgaccatggc tgagaaagttc cgtgacgaag gtcgtgacgt tctgctgttc 660
gttgataaca tctatcgta caccctggcc ggtactgaag tatctgcact gctgggtcgt 720
atgccatcag cggtaggcta ccagccaacc ctggcggaag agatgggtgt tctgcaggaa 780
cgtatcacct ctacaaaaac cggttc 806

<210> 268
<211> 810
<212> DNA
<213> *Citrobacter youngae* ATCC 29935

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ggtctgcgtc gtggtctgga agttaaagac ctcgagcacc cgatcgaagt cccggtaggt 180
aaagcaacgc tgggtcgtat catgaacggt ctgggtcacc cgatcgacat gaaaggcgat 240
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aagggcggtg aagttggtct gttcgggtggt gcgggtgtag gtaaaaccgt aaacatgatg 420
gagcttattc gtaacatcgc gatcgaacac tccggttact ctgtgtttgc ggggtgtagt 480
gaacgtactc gtgagggtaa cgacttctac cacgaaatga ccgattccaa cgttctggat 540
aaagtatccc tgggttatgg ccagatgaac gagccgccgg gaaaccgtct gcgcggttgcg 600
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cgtatcactt ctacaaaaac cggttctatc 810

<210> 269
<211> 827
<212> DNA
<213> *Clostridium innocuum* ATCC 14501

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tgggcgggtac agatgggtctg gttcgtggaa tgggaagccat tgatacagga tccgcaatcc 180
gtgtaccggg gggaaaagaa attctgggaa gaatgttcaa tgcctcggg cgtgaaattg 240
atggtctggg acctgtagga acggataaca cactgccgat ccacagacag gcaccgggct 300
ttgaggagca gcagacatcc gcagaaatgc tggaaacagg aattaagggtc attgacctgt 360
tatgtccata ttccaagggt ggtaagattg gtttgtttgg tgggtcgggg gtaggtaaaa 420
ccgtactgat tcaggagctg attcataata tcgccaagga acatgggtgga atgtccgtcg 480
ttaccgggtg aggggagaga acccggtgaag gaaacgacat gtatcatgaa atgaaggaca 540
gcggtgtcct tgataagacc gtactggttt acggacagat gaatgaatca ccgggtgcc 600
gaatgcgtgt cggctgacc gggctgacga tggcggaata tttcgtgat cacgaccatc 660
aggatgtatt gctgtttatt gataatattt tccgttttac ccaggcgggg agtgaagtaa 720
gtgccctgct gggacgtatg ccaagtgcag taggctatca gccgacactt gcgacagaaa 780
tgggacagct gcaggagcgc attacatcca cgaaggatgg ttccatt 827

<210> 270

<211> 829
 <212> DNA
 <213> Clostridium perfringens ATCC 13124

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 gaagctactg aaggactaag aagaggtgta gaagctgttg atacaggagc acctatatca 180
 gtaccagttg gtgaatgcgt attaggaaga atatttaacg tattaggtaa accactagat 240
 agtggagctg aagttaataa cgaagaaaaa tatccaattc atagaccagc tccatcattt 300
 gaagaacaat cagttgttcc tcaaatgttt gagacaggaa taaaggttat cgacctttta 360
 gcaccttacc aaagaggggg aaaaatcggg ctatttggag gtgcagggtg tggtaaaaca 420
 gttcttatcc aagagcttat aaacaacata gctaaagagc acggtggact ttctgtattc 480
 acaggagttg gagaaagatc aagagaaggt aatgaccttt actatgaaat gatggaatca 540
 ggagttataa aaaatacagc attagtattt ggacaaatga acgaaccacc tggagcaaga 600
 atgagagttg ctttaacagg acttactatg gctgagtact tcagagacca aggtcaagac 660
 gtgttattat tcatagataa catattcaga ttctcacaag ctggatcaga ggtttcagct 720
 ttattaggaa gaataccatc agctgttggt taccaacca ctcttgctac agagatggga 780
 gctcttcaag agagaatcac atcaactacc catggatcaa ttacatcag 829

<210> 271
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 271
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<210> 272
 <211> 818
 <212> DNA
 <213> Corynebacterium diphtheriae ATCC 27010

<400> 272
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 cgtgtccatg gcccctaccg acggcctcgt ccgtgggtgct gttgtgaccg actcgggcaa 180
 gccaatctcc gtgccagttg gcgacgttgt taaaggccac gttttcaacg cactgggcga 240
 ttgcttggat gagccaggtc tcggccgcga tggtagagcag tgggggaattc accgcgatcc 300
 accaccattc gatcagctcg aaggttaagac cgaaatcctc gagaccggtg ttaaggatcat 360
 cgacttgctc accccttacg ttaagggcgg caagattggt ctgttcggtg gtgcagggtg 420
 gggtaagacc gtgctcatcc aggagatgat cactcgtatt gctcgcgagt tctccggtac 480
 ctccgtcttc gctggcggtt gtgagcgta ccgtaggggc accgacctct tctcgaat 540
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 aggagtccgt atgcgcgttg ctctgtccgg tctgaccatg gcggagtact tccgcgatgt 660
 tcagcaccag gacgtgcttc tgttcacga taacattttc cgtttcaccc aggcgggttc 720
 cgaggtttcg acccttcttg gtcgtatgcc ttccgcggtg ggttaccagc caaccttggc 780
 tgacgagatg ggtgttctcc aggagcgtat tacctcta 818

<210> 273
 <211> 833
 <212> DNA
 <213> Corynebacterium pseudodiphtheriticum ATCC 10700

<400> 273
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 cacctacgga cggctctcgc cgtggcgctg aggttatcga cactggtaag ccaattactg 180
 ttcccgcgga cgatgccgct aaaggacacg tcttcaatgc gtcgggtgag tgtttggacg 240

aaccaggatt	gggcccgcgac	ggcgaacagt	ggggaatcca	ccgcgatccg	ccaccattcg	300
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ccccttacgt	taagggtggc	aaaatttggtc	tgttcgggtgg	cgccggcgtc	ggcaagaccg	420
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cgctgttggg	ccgtatgcct	tccgccgtgg	gttatcagcc	aacattgggt	gatgagatgg	780
gtgttttgca	ggaacggatt	acctctacac	gtggtaagtc	aattacttcc	ctg	833

<210> 274

<211> 417

<212> DNA

<213> *Corynebacterium ulcerans* NCTC 8665

<400> 274

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tcgccggcgt	cgccgagcgc	acccgtgagg	gcaacgacct	ctgggtcgag	atggacgagg	120
ccgacgtgct	caaggacacc	gccctgggtg	tcggccagat	ggacgagccg	ccgggaaccc	180
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aggacgtgct	gctgttcatc	gacaacatct	tccgcttctc	ccaggccggc	tccgaggtct	300
ccaccctgct	gggccgcgat	ccctccgcgg	tgggctacca	gccgaacctg	gcggacgaga	360
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<210> 275

<211> 835

<212> DNA

<213> *Corynebacterium urealyticum* ATCC 43042

<400> 275

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aagaccatta	ccctggaggt	cgcacagcac	ctgggtgaca	acctggtgcg	caccgtctcc	120
atggccccga	ccgacggcct	ggtccgcggt	gcagaggcca	aggacaccgg	taagccgatc	180
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ttcgacgagc	tcgagggtaa	gaccgagatc	ctggagaccg	gcgttaaggt	catcgacctg	360
ctgacccctt	acgtcaaggg	cggcaagatt	ggcctcttcg	gtggtgcagg	tgtgggtaag	420
accgtcctga	ttcaggagat	gattaccctg	atcgcccgcg	agttctccgg	tacctccgtg	480
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atgggcgtgc	tccaggacac	cgcgctgggt	ttcggtcaga	tggatgagcc	gccgggagtc	600
cgtatgcgcg	tggctctgtc	cggctctgacc	atggcggagt	acttccgcga	tgttcagggc	660
caggacgtgc	tgtctttcat	cgacaacatc	ttccgtttca	cccaggcagg	ttctgaggtc	720
tccacgctgc	tcggcgcgat	gccgtccgca	gtgggttacc	agccgacctt	ggctgacgag	780
atgggtgttc	tgcaggagcg	cattacctcc	acgaagggta	agtccattac	ctccc	835

<210> 276

<211> 818

<212> DNA

<213> *Coxiella burnetii* strain Nine Mile phase II

<400> 276

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tcgaagtcca	acagcaactc	ggggacgggtg	tcgtgcgcac	aattgccatg	ggcagcactg	120
agggcttaaa	acgcgatatc	gccgtaaaaa	atacggaaaa	accgattgaa	gttcccgtag	180
gaaaagaaac	tttaggtcgt	atcatgaacg	tgtcgggtga	gccgatcgat	gagttaggtc	240
ccattaattc	aaaagaaaaa	ctccctattc	atcgtcctgc	gccgagcttt	attgagcaat	300
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ttatcgcataa	tatcttttcgt	tacacttttgg	caggggttga	agtctctgcc	ctcctcggtc	720
ggatgccatc	ggctgtgggt	tatcagccga	cgttggccga	agagatgggg	gccctgcaag	780
aacgcattac	ttccactaaa	aaagggtcca	ttacgtcg			818

<210> 277
<211> 829
<212> DNA
<213> *Edwardsiella hoshinae* ATCC 33379

<400> 277						
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aaactggtac	tgggaagtga	gcagcagctg	ggtggcgccg	tagttcgctg	catcgcgatg	120
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gttctctgtg	gcaaggcgac	tctgggccgt	atcatgaacg	tactgggtga	tccggtcgac	240
atgaaggcg	agatcggtga	agaagagcgt	tgggctatcc	atcgtgctgc	accgagctat	300
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tgcccgttcg	ctaaaggcgg	taaagtgggc	ctgttcgggtg	gggcccgtgt	gggtaagacc	420
gttaacatga	tggagcttat	ccgtaacatc	gctatcgagc	actccgggtta	ctcagtcctc	480
gccggtgtgg	gtgagcgtac	ccgtgagggg	aacgacttct	accacgagat	gaccgattcc	540
aacgtatttg	ataaagtttc	tctgggtgtat	ggtcagatga	acgagccacc	gggaaaccgt	600
ctgcgcgtgg	cgctgaccgg	tctgaccatg	gcggagaaat	tccgtgatga	aggtcgtgat	660
gtactgttgt	tcatcgataa	catctaccgt	tataccttgg	ccggtactga	agtctccgct	720
ctgctgggcc	gtatgccgtc	ggcggtaggt	tatcagccga	ctctggcgga	ggaaatgggg	780
gtgctgcaag	agcgtattac	ctccactaag	accgggtcca	tcacctctg		829

<210> 278
<211> 809
<212> DNA
<213> *Edwardsiella tarda* ATCC 15947

<400> 278						
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aaagggcgta	aagttggcct	gttcggtggg	gccggtgtgg	gtaagaccgt	taacatgatg	420
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gagcgtaccc	gtgagggtaa	cgacttctac	cacgagatga	ccgactccaa	cgtattggat	540
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<210> 279
<211> 840
<212> DNA
<213> *Eikenella corrodens* ATCC 23834

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<211> 803

<212> DNA

<213> Enterobacter agglomerans ATCC 27989

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<210> 281

<211> 833

<212> DNA

<213> Enterobacter amnigenus ATCC 33072

<400> 281

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<210> 282

<211> 810

<212> DNA

<213> Enterobacter asburiae ATCC 35953

<400> 282

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<210> 283

<211> 811

<212> DNA

<213> Enterobacter cancerogenus ATCC 35317

<400> 283

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<210> 284

<211> 817

<212> DNA

<213> Enterobacter cloacae ATCC 13047

<400> 284

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<210> 285

<211> 766

<212> DNA

<213> Enterobacter gergoviae ATCC 33028

<400> 285

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<210> 286
<211> 805
<212> DNA
<213> Enterobacter hormaechei ATCC 49162

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<210> 287
<211> 791
<212> DNA
<213> Enterobacter sakazakii ATCC 29544

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<210> 288
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<212> DNA
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<211> 847
<212> DNA
<213> *Enterococcus casseliflavus* ATCC 25788

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<210> 290
<211> 845
<212> DNA
<213> *Enterococcus durans* ATCC 19432

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<210> 291
<211> 840
<212> DNA
<213> *Enterococcus faecalis* ATCC 29212

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<210> 292
<211> 831
<212> DNA
<213> *Enterococcus faecium* ATCC 19434

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<211> 826
<212> DNA
<213> *Enterococcus gallinarum* ATCC 49573

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atgtgctctt gtttatcgat aatattttcc gtttcacaca agcgggttct gaagtatctg 720
ccttgttagg ccggatgcca tcagccgttg gttatcaacc aactctagca actgaaatgg 780
gtcaattaca agaacgaatc acttctacga aaaaaggatc tgtaac 826
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<210> 294
<211> 846
<212> DNA
<213> *Enterococcus saccharolyticus* ATCC 43076

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cgattgctat gtcgtcaaca gacggtttgc aacgtgggat ggaagtcacg gatacaggag 180
catcaatttc tggttcctgtt gggaaagaga cattaggacg tgtatttaac gttttagggg 240
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gtgtaggtaa aacggtatta attcaagaat tgattaacaa tattgcgcaa gaacatgggtg 480
gtatttcagt atttgcgggt gttgggtgagc gtactcgtga aggaaatgac ctttattatg 540
aaatgaaaaga gtcgggcgtt attgagaaaa cagcgatggg ttttggacaa atgaacgaac 600
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caccaggtgc acgtatgcga gttgctttaa ctggtttaac cattgcagaa tacttccgtg 660
atgttgaagg acaagatgta ttactattta ttgataacat tttccgtttt actcaagctg 720
gttcagaagt ttcagcttta ttaggacgta tgccttcagc ggtaggggtat caaccgacat 780
tagcaacaga aatgggacaa ttacaagaac gtattacgtc aacgaaaaaa ggctcaatta 840
catcaa
```

<210> 295
<211> 803
<212> DNA
<213> *Escherichia fergusonii* ATCC 35469

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<400> 295
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gagcttattc gtaacatcgc gatcgagcac tccgggttact ctgtgtttgc gggcgtaggt 480
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ctgaccggcc tgaccatggc tgagaaattc cgtgacgaag gtcgtgacgt tctgctgttc 660
gttgacaaca tctatcgtaa caccctggcc ggtacggaag tatccgcact gctgggccgt 720
atgccttcag cggtaggtta tcagccgact ctggcggaag agatgggcgt tcttcaggaa 780
cgtatcacct ccaccaaacc tgg
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<210> 296
<211> 822
<212> DNA
<213> *Escherichia hermannii* ATCC 33650

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<400> 296
gatgccgtac cgcgcgtgta cgatgctctt gaggtgcaaa atggtgatga gcgtctggtg 60
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gacggtctgc gtctgtgtct gactgtcgtc gacctcgagc acccgatcga agtcccggta 180
ggtaaagcga ccctggggccg tatcatgaac gtgctgggtc agccgatcga catgaaaggc 240
gatctcggtg aagaagagcg ttgggcgatt caccgcgcgg cgccgtccta tgaagagctg 300
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ggtgaacgta ctctgtgagg taacgacttc taccatgaaa tgaccgactc caacgttctg 540
gacaaagtat ccctggttta cggccagatg aacgaaccgc cgggaaaccg tctgcgcgtt 600
gcactgaccg gcctgaccat ggctgagaaa ttccgtgacg aaggtcgtga cgttctgttg 660
ttcgtcgaca acatctaccg ttacaccctg gccggtactg aagtatccgc actgctgggc 720
cgtatgcctt ctgcggtagg ttaccagccg accctggcgg aagagatggg cgttctgcag 780
gagcgtatca cctccaccaa aaccggttct atcacctccg ta
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<210> 297
<211> 808
<212> DNA
<213> *Escherichia vulneris* ATCC 33821

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<400> 297
ccgaacgtgt acgacgccct cgaagtgaca aatggtaatg agcgtctggt gctggaagtt 60
cagcagcagc tcggcgggcggt tatcgtacgt accatcgcta tgggttcttc cgacggtctg 120
cgtcgtgggtc tggaaagttca ggacctcgag cacccgatcg aagtgccggg aggtaaagcg 180
accctgggtc gtatcatgaa cgtactgggt cagccgatcg atatgaaagg cgacatcggt 240
gaagaagagc gttgggctat tcaccgtgca gcaccgtcct atgaagagct ctccagctct 300
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actcgtgagg gtaacgactt ctaccacgag atgaccgact ccaacgttct ggacaaagta 540
```


tccctggtgt	acggccagat	gaacgagccg	ccgggaaacc	gtctgcgct	ggcactgacc	600
ggcctgacca	tggctgagaa	gttccgtgac	gaaggtcgtg	acgttctgct	gttcgttgac	660
aacatctatc	gttacaccct	ggccggtacg	gaagtatctg	cactgctggg	ccgtatgcct	720
tcagcggtag	gttaccagcc	gacgctggcg	gaagagatgg	gcgttctgca	ggagcgtatc	780
acctccacca	aaaccggttc	tatcacct				808

<210> 298

<211> 843

<212> DNA

<213> Eubacterium lentum ATCC 43055

<400> 298

tttccccctg	atcagctgcc	ggcgatttac	aacgcgctga	cggttgatgc	caagaccctg	60
gcgggcgact	tgcacctcgt	gctcgaggtc	gagacgcacc	tgccgggcaa	ccttgctccgc	120
tcggtggcca	tgagctcgac	ggacggtctc	gtccgcggcc	tcgaggctcg	cgacacgggc	180
aacccgatca	tgatgcccgt	gggtcccgag	accctgggtc	gcatctggaa	cgtcatgggc	240
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atcgacctcg	tcgagccctt	cgtcaagggc	ggcaagacgg	gtctgttcgg	cggcgcgggc	420
gtgggcaaga	cggttatcat	ccaggagctc	atcaacaacc	tggcccagga	gcacggcggc	480
acgtcgggtg	tcacgggcgt	gggcgagcgt	acccgcgagg	gtaccgacct	ctacctggag	540
atgagcgact	cgggcgtcat	caacaagacc	tgcctcgtgt	acggtcagat	gaacgagcct	600
ccgggagcgc	gtctgcgcgt	gggtctcgcg	ggcctcaccg	aggcggagta	cttcgcgcgt	660
cagggccagg	acgtgcttct	gttcgtggac	aacatcttcc	gcttcacgca	ggccggctcc	720
gaggtgtccg	ctctgctggg	ccgcatgcc	tctgccgtgg	gttaccagcc	gacgctggca	780
accgagatgg	gcgacctgca	ggagcgcacc	acgtcgacgt	ccaccggctc	catcacgtcc	840
gtg						843

<210> 299

<211> 829

<212> DNA

<213> Ewingella americana ATCC 33852

<400> 299

tccctcagga	tgcagtaccg	aacgtgtaca	atgctcttga	ggtagaaaac	ggtgcctcca	60
aactggttct	ggaagttcag	caacagttag	gcggcggcgt	tggtcgttgt	atcgcaatgg	120
gtacctcaga	cggccttcgt	cgcggtctga	aagtgaacaa	cctggaacac	ccaattgaag	180
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aagagctggc	taactcccaa	gaattgctgg	aaaccggtat	caaagttatg	gacctgatgt	360
gtccgttcgc	taagggcggt	aaagtccgtc	tggtcgggtg	tgccgggtgt	ggtaaaactg	420
taaacatgat	ggagctgac	cgtaacatcg	cgatcgagca	ctccggttac	tcagtgtttg	480
caggcgtggg	tgagcgtact	cgtgagggtga	acgacttcta	ccacgaaatg	actgactcca	540
acgttatcga	caaagtttcc	ctggtctatg	gtcagatgaa	tgagccacca	ggtaaccgtc	600
tgcgcgttgc	actgaccggc	ctgaccatgg	cggagaaatt	ccgtgatgaa	ggtcgtgacg	660
tactgctgtt	cgttgacaac	atttaccgtt	acaccctggc	aggtaccgaa	gtgtccgcac	720
ttctggggcg	tatgccatcg	gcggtaggtt	atcagccaac	gctggcggaa	gagatgggtg	780
ctctgcaaga	gcgtatcacc	tctaccaaaa	gtggttctat	cacctccgt		829

<210> 300

<211> 805

<212> DNA

<213> Francisella tularensis strain LVS

<400> 300

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cagcaacaaa	ttggtgatgg	cgtagttcgt	acaattgcta	tgggatctag	tgatggctct	120
agacgtggta	tggaggttaa	gaacacaaat	gcgcctatct	ctgttccagt	tggacatggc	180
acacttggac	gtatcatgaa	tgtttttaggt	gaaccaattg	atgaagctgg	tccaattgaa	240
tatactgaga	aaagatctat	ccatcaagct	cctcctgcat	atgatgagtt	agcattaaagt	300
acagaaatat	tagaaacagg	tatcaaagta	gttgacctta	tttgtccatt	tgctaagggc	360
ggtaaaagttg	gtttattttg	cgggtgcaggt	gttggtaaaa	ctgtaacgat	gatggaactt	420
atcaacaata	ttgcaaaaaga	acatagtggc	tactctgtat	tttccgggtg	tgggtgaaaga	480

actcgtgaag	gtaatgactt	ctactatgag	atgaaatatt	ctaattgtatt	ggataaagta	540
tcattagtat	atgggtcagat	gaatgagccg	cctggaaaca	gattaagagt	agctcttagt	600
ggcttaacaa	tagcagaagg	attccgtgat	gaaaagcgtg	atgttttgat	gtttatcgat	660
aacatctatc	gttatacatt	agcaggtaca	gaggtatcgg	cgctacttgg	tcgtatgccca	720
tctgctgtgg	gttatcagcc	aacgcttgca	gctgagatgg	gtgctttaca	ggagcgtatt	780
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<210> 301

<211> 825

<212> DNA

<213> *Fusobacterium gonidiaformans* ATCC 25563

<400> 301

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gatggattgc	ttcgaggaat	ggaagtaatg	gataccggag	caccgattac	tggtccagta	180
gggaaggcgg	tttttaggaag	aatattgaat	gttttgggag	agcctgtgga	tcaaaaaggg	240
cctgtggaaa	cagaagaata	tttacctatc	catagagaag	cacccaaatt	tgaagaacaa	300
gaaacagtaa	cagaaatttt	tgaaacagga	attaaagtca	tagatttggt	agccccttat	360
atcaaaggag	gaaagacagg	tctattcggg	ggagccggag	tagggaaaaac	agttttaatt	420
atggaattaa	ttaataacat	tgcaaagggc	cacggaggaa	tttctgtggt	tgaggaggtt	480
ggagaaagaa	caagagaagg	aagagattta	tacaacgaaa	tgacagagtc	cggagttttg	540
aataagacct	cgttggtgta	tggtcaaatg	aatgagccgc	ccggagcaag	acttcgtgtg	600
gcgttgacag	gattaacggg	tgctgaaaac	tttagagata	aagaagggca	agatgtattg	660
ttgtttatcg	acaatatctt	ccgtttcaca	caagcaggat	cagaagtatc	ggctctattg	720
ggaagaattc	catcggcagt	aggatatcaa	ccgaacttag	cgacagaaat	gggaacttta	780
caagaaagaa	ttactttctac	aaaatcagga	tctatcactt	cggtta		825

<210> 302

<211> 806

<212> DNA

<213> *Fusobacterium necrophorum* subsp. *necrophorum* ATCC 25286

<400> 302

acaatgcatt	aaaggtacag	gtggggagaaa	gggaacttgt	gttggaagtg	cagcaacatt	60
taggaaataa	tggtgtcaga	acagtagcaa	tggtattcaac	agacggatta	cttcggggaa	120
tggaagttag	agatacagga	gttccccatta	ctgttccggg	aggaaaggcg	gttttgggaa	180
gaatattaaa	tgtcttaggg	gagcctgtgg	acgaaaaagg	tccgatagag	acagaagaat	240
atttaccat	acatagagaa	gcaccgaaat	ttgaagaaca	ggaaacgggtg	acagaaattt	300
ttgaaacagg	aattaaagtc	attgatttgt	tagctcctta	tattaaagga	ggaaaaacag	360
gcctattcgg	aggagccgga	gtaggaaaaa	ccgtttttgat	tatggaactg	atcaataata	420
ttgcaaaagg	tcatggagga	atttctgttt	ttgcaggagt	tgagagaaaga	acgagagagg	480
gaagagatct	atacaacgaa	atgacagagt	ccggagtttt	gaataaaact	tcttttggtat	540
atggggcaaat	gaatgagccg	cccggagcaa	gacttcgagt	ggctttaacc	ggacttactg	600
ttgccgaaaa	tttcagagat	aaagagggac	aggatgtctt	attgttcatt	gacaatattt	660
tccgtttcac	acaagcagggt	tccggaagtat	cggcactttt	ggggagaatt	ccttctgcag	720
tgggatatca	accgaacttg	gcgacagaaa	tgggaagctt	acaagaaaga	attacttcta	780
caaaatccgg	ttctatcact	tccgtg				806

<210> 303

<211> 821

<212> DNA

<213> *Fusobacterium nucleatum* subsp. *polymorphum* ATCC 10953

<400> 303

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gatggattaa	aaagaggaat	ggaagttata	gatacaggta	aaccaattac	agtaccagtt	180
ggtaaagctg	ttcttggtag	aatattaaat	gttttaggag	aacctgttga	taatcaaggt	240
cctataaaatg	ctgaaacatt	tttacctatt	catagagaag	caccagaatt	tgatgactta	300
gaaactgaaa	ctgaaatatt	tgaaacagga	ataaaagtta	tagacttatt	agcaccatat	360
attaaaggtg	gaaaaatagg	attatttggg	ggagctggag	taggaaaaac	agttttaata	420
atggaactta	tcaacaacat	tgcaaaaagga	catggaggaa	tttcagtttt	tgaggaggtt	480

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ggagaaagaa caagagaagg tagagactta tatggtgaaa tgactgaatc aggagttatc 540
acaaaaaacag ctcttggtta tggacaaatg aatgagccac ctggagcaag acttagagtt 600
gcattaacag ggcttactgt tgcagaaaac tttagagata aagatgggca agatgttctt 660
ctatttatag ataatatatt tagattttaca caagcaggtt cagaagtttc agctttactt 720
ggaagaatac catcagctgt tggatatcaa ccaaacctag caactgaaat ggggtgcttta 780
caagaaagaa taacatctac aaaatctggt tcaattacat c 821

```

<210> 304
 <211> 864
 <212> DNA
 <213> *Gardnerella vaginalis* ATCC 49145

```

<400> 304
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gattcaactg tgcgagcagt ggcaacttaag cctacggacg gcttggtccg tgggtgcttta 180
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cgctggccaa tccaccgcaa cccacctgct ttcatcagc ttgagtctaa gactcaaatg 360
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ggctctgttcg gtggtgcagg cggttgtaaa actgtgttga ttcaggagat gattcagcgc 480
ggtgcacaga accacggcgg tgtgtctgtg tttgctggcg ttggcgaacg tactcgtgag 540
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ttccgcttta ctcaggcagg ttctgaggtt tccacgttgc ttggtcgtat gccttctgca 780
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```

<210> 305
 <211> 848
 <212> DNA
 <213> *Gemella haemolysans* ATCC 10379

```

<400> 305
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gaacaatcgc tatgtcatct actgatggat taaatagggg agcagaagta gtatatacag 180
gagcaccaat tacagttcct gtaggtaact acacattagg tcgtgtgttc aacgtattag 240
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aagaagctcc aacattcgat gaattatcaa ctcacgttga ggttcttgaa acagggtatta 360
aagttatcga cttacttgca ccatatatta aaggtggtaa aatcggtctt ttcggtggg 420
cgggagttgg taaaaagggt cttatccaag aacttatcaa caacgttgcg caacaacacg 480
gtggattatc agtattcaca ggtgtaggtg agcgtactcg tgaaggaaat gacttatact 540
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aaccaccagg tgctcgtatg cgtgtagcat taacaggatt aacaatggcg gaatacttcc 660
gtgatgaaga aggacaagac gtgcttctat tcatcgataa cattttccgt ttcacacaag 720
caggttctga ggtttctgcg ttattaggac gtatgccatc agccgttggt taccaaccaa 780
cacttgctac agagatggga cgtttacaag aacgtataac atcaactaaa aaaggttctg 840
ttacatct 848

```

<210> 306
 <211> 848
 <212> DNA
 <213> *Gemella morbillorum* ATCC 27824

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gaactattgc gatgtcatct actgatggat taacagagg ggcagaagta gttgatactg 180
gagcgccaat tacagtgcga gtaggtaact atacattagg acgtgtgttc aacgtattag 240
gtgaagcagt tgaccacgga gaagaagctg gagcagaagt tcaaaaagaa tctattcata 300
aagaagctcc aactttcgaa gaattatcaa cacatgttga ggtattagaa acagggtatta 360

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aagttatcga ccttcttgcga ccatatatta aaggtggttaa gattggacta ttcggtggtg 420
ctggagttgg gaaaacagtt cttatccaag aacttattaa caacgtagca caacaacacg 480
gaggactttc agtatttact ggggtaggtg aacgtactcg tgagggtaac gacttgtact 540
atgaaatgaa agactctgga gttattaata aaactgccat ggtatttggt caaatgaatg 600
agccaccagg tgcacgtatg cgtgttgccct taacaggatt aacaatggca gagtacttcc 660
gtgatgaaga aggacaagac gtactattat ttatcgataa tatcttccgt ttcacacaag 720
cagggctctga ggtatctgca ttattagggc gtatgccttc agccggttga tatcaaccaa 780
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ttacatct

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<210> 307
 <211> 813
 <212> DNA
 <213> *Haemophilus ducreyi* DSM 8925

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<400> 307
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aagcgtagct taaaggttgt aaatacaggc aaccctattc aagttcctgt aggcactaaa 180
acattaggcc gtattatgaa tgtattaggc gaaccaattg atgaaaaagg acctattagc 240
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actcgtgaag gtaatgattt ttatcatgaa atgacggatt ctaatgtatt agataaagta 540
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ggtttaacta tggctgaaaa attccgtgat gaaggtcgtg atgtattatt tttcgtagat 660
aatatttatc gttatacttt agccggtaca gaagtttctg ctttattagg ccgtatgcca 720
tcagcggtag gttatcaacc aacccttgca gaagaaatgg gtgtattaca agaacgtatt 780
acctcaacta aaactgggtc aatcacggca gta
813

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<210> 308
 <211> 826
 <212> DNA
 <213> *Haemophilus haemolyticus* ATCC 33390

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<400> 308
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826

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<210> 309
 <211> 809
 <212> DNA
 <213> *Haemophilus parahaemolyticus* ATCC 10014

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acccttgggt gtattatgaa cgtattgggt gagccgattg acgaaaaagg tcctatcggt 240
gaagaagcac gctgggcaat ccaccgtgca gcaccaagct acgaagagca atcaaatagc 300

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atccgtaaca	tcgcgatcga	acactctggt	tactctgtat	ttgcaggggt	aggtgagcgt	480
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tcgttagtgt	atggtcaaatt	gaacgaacca	ccaggtaacc	gtttacgcgt	agctttaaca	600
ggcttaacca	tggcggaaaa	attccgcgat	gaaggctcgtg	acgtattatt	cttcgtcgat	660
aacatctacc	gttataccct	agcaggtagc	gaagtgtcag	cacttctcgg	tcgtatgcca	720
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<211> 824
<212> DNA
<213> *Haemophilus parainfluenzae* ATCC 7901

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tgttgcttta	accgggttta	ccatggcgaga	aaaattccgt	gacgaaggtc	gtgatgtatt	660
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<210> 311
<211> 811
<212> DNA
<213> *Hafnia alvei* ATCC 13337

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<210> 312
<211> 831
<212> DNA
<213> *Kingella kingae* ATCC 23330

<400> 312						
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aagcaacatt	gggtcgtatt	atggacgtat	tgggtaatcc	tgttgatgaa	gcaggtccaa	240
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agttgattaa caacattgcc aaagcgcaca gtgggtttgtc tgtatttgca ggcgtgggtg 480
aacgtactcg cgaaggtaat gacttctatc acgagatgaa agatttctaac gtgttgata 540
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cggcattgct gggctcgtatg ccctctgcgg taggttatca accaacattg gcagaagaaa 780
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<210> 313
<211> 812
<212> DNA
<213> *Klebsiella pneumoniae* subsp. *ozaenae* ATCC 11296

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cgctgaccgg cctgaccatg gctgagaaat tccgtgacga aggtcgtgac gtactgctgt 660
tcgtcgataa catctatcgt tacaccctgg ccggtactga agtatccgcg ctgctgggtc 720
gtatgccttc agcggtaggt tatcagccga cctggcgga agagatgggc gttctgcagg 780
aacgtatcac ctccaccaa accggttcta tc 812
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<210> 314
<211> 812
<212> DNA
<213> *Klebsiella ornithinolytica* ATCC 31898

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acggtctgcg tcgtgggtctg gaagttaaaag accttgagca cccgatcgaa gtcccgggtg 180
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tggagctgat ccgtaacatc gcgatcgagc actccggtta ctccgtgttt gcgggcgtag 480
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<210> 315
<211> 813
<212> DNA
<213> *Klebsiella oxytoca* ATCC 33496

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gcaacgctgg gtcgtatcat gaacgtactg ggccaaccgg tagacatgaa aggcgacatc 240
ggcgaagaag agcgttgggc gattcaccgc gcagcgcctt cctacgaaga gttgtcaaac 300
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ctgatccgta	acatcgcgat	cgagcactcc	ggttactccg	tgtttgccgg	cgtaggtgaa	480
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accggcctga	ccatggctga	gaagttccgt	gacgaaggtc	gtgacgttct	gctgttcgtc	660
gataacatct	atcgttacac	cctggccggg	actgaagtat	ccgcactgct	gggtcgtatg	720
ccttcagcgg	taggttacca	gccgactctg	gcggaagaga	tgggcgttct	gcaggaacgt	780
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<210> 316

<211> 822

<212> DNA

<213> *Klebsiella planticola* ATCC 33531

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cgtatgcctt	cagcggtagg	ttatcagccg	accctggcgg	aagagatggg	tgttctgcag	780
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<210> 317

<211> 785

<212> DNA

<213> *Klebsiella pneumoniae* subsp. *pneumoniae* ATCC 13883

<400> 317

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gttactctgt	gtttgcgggc	gtagggtgagc	gtactcgtga	gggtaatgac	ttctaccacg	480
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<210> 318

<211> 759

<212> DNA

<213> *Kluyvera ascorbata* ATCC 33433

<400> 318

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ccggtmgtga	aagcaacmct	gggtcgtatc	atgaacgtac	tgggtcakcc	agtmgacatg	180
aaaggcgaca	tcgggtgaaga	agagcgttgg	gctatccacc	gcgctgcacc	ttcctacgaa	240
gagctgtcta	gctctcagga	attgctggaa	accgggtatca	aagttatcga	cctgatgtgt	300

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<210> 319
 <211> 831
 <212> DNA
 <213> *Kluyvera cryocrescens* ATCC 33435

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<210> 320
 <211> 810
 <212> DNA
 <213> *Kluyvera georgiana* ATCC 51603

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<210> 321
 <211> 834
 <212> DNA
 <213> *Lactobacillus acidophilus* ATCC 4356

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ttactggtgt	tggtgaaaga	actcgtgaag	gtaatgacct	ttactttgaa	atgaaagctt	540
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<210> 322

<211> 824

<212> DNA

<213> *Legionella pneumophila* subsp. *pneumophila* ATCC 33152

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tgtttatcga	taatatattt	cgttatacct	tggtcggggg	tgaagtatct	gcgctgttag	720
gccgtatgcc	ttctgcagta	ggatatcagc	cgacattagc	agaggaaatg	ggtatgctgc	780
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<210> 323

<211> 818

<212> DNA

<213> *Leminorella grimontii* ATCC 33999

<400> 323

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atcgggcgaag	aagagcggtg	ggctattcac	cgcgcagcgc	cgagctacga	agacctgtcg	300
ggcgcaaccg	agctgctgga	gaccggcatc	aaggttatcg	acctgatttg	tccgttcgcc	360
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atgccttcag	ccgtaggcta	ccagccgact	ctggctgagg	aaatgggcgt	gcttcaagag	780
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<210> 324

<211> 835

<212> DNA

<213> *Listeria monocytogenes*

<400> 324

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aagcaccaac	tagccaactt	actttagaag	tagccatcca	attaggtgat	gatgttgtac	120
gtacaatcgc	aatggcatca	acagatgggt	ttcaaagagg	tatggaagtt	attgatactg	180
ggagcccaat	tacagttcct	gtaggtacag	taactcttgg	tcgtgtattt	aatgtattag	240
gaaacacccat	cgatttggac	gaaccacttc	caagcgatat	taaacgtaat	aaaattcacc	300
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ctgggttcaga	ggtttcggct	ttactaggtc	gtatgccatc	tgcggtaggt	taccaaccaa	780
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<210> 325

<211> 828

<212> DNA

<213> *Micrococcus lylae* ATCC 27566

<400> 325

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cgaggtttcc	accctcctag	gccgcgatgc	ttctgccgtg	ggttaccagc	caacgctggc	780
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<210> 326

<211> 822

<212> DNA

<213> *Moellerella wisconsensis* ATCC 35017

<400> 326

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gatggtttta	gccgcggttt	agaagttaaa	aatacagatc	atccgatcga	agttcctgtc	180
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gctaactcaa	cagaacttct	agaaacaggt	atcaaagtta	tggacctgat	ttgcccattc	360
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gataaagttt	cattgggttt	tggccagatg	aatgagccac	caggaaaccg	tctgcgtgtt	600
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cgtatgcctt	cagcgggtgg	ttatcagcca	acgctggcgg	aagagatggg	tgttctgcaa	780
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<210> 327

<211> 854

<212> DNA

<213> *Branhamella catarrhalis* ATCC 43628

<400> 327

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tcaagcaaca	ctgggtcgca	ttatggatgt	cctaggtcgc	ccaatcgatg	aagcaggtcc	240
ggtaaatgct	gaacaaaaat	ggtccattca	tcgtgaagca	ccaagttagt	atgaacagtc	300
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caaaggtggt	aaagtcggtc	tggttcggtgg	tgctggtggt	ggtaagaccg	ttaacatgat	420
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<210> 328

<211> 831

<212> DNA

<213> *Moraxella osloensis* ATCC 19976

<400> 328

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aggtctaaaa	cgtgggtctac	cagtttagcaa	cactggcgca	ccaatctctg	tacctgtggg	180
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tcgtgacgta	ttattgttcg	ttgacaatat	ttatcggtac	acgctagcgg	gtaccgaagt	720
atcagcatta	ttaggtcgta	tgccatctgc	agtagggat	cagccaacgc	ttgcagaaga	780
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<210> 329

<211> 835

<212> DNA

<213> *Morganella morganii* subsp. *morganii* ATCC 25830

<400> 329

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cgcgctgtta	ggccgtatgc	cttcagcggg	aggttaccag	ccgacactgg	cggaagaaat	780
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<210> 330

<211> 824

<212> DNA

<213> *Pantoea agglomerans* ATCC 27155

<400> 330

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atgggtgtgt	tgcaggagcg	tattacctcc	accaagaccg	gttc		824

<210> 331
 <211> 808
 <212> DNA
 <213> *Pantoea dispersa* ATCC 14589

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<210> 332
 <211> 805
 <212> DNA
 <213> *Pasteurella multocida* NCTC 10322

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<210> 333
 <211> 828
 <212> DNA
 <213> *Pragia fontium* ATCC 49100

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<210> 334
 <211> 807
 <212> DNA
 <213> *Proteus mirabilis* ATCC 25933

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<210> 335
 <211> 811
 <212> DNA
 <213> *Proteus vulgaris* ATCC 13315

<400> 335						
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taacatctat	cgttacacct	tagccggtac	cgaagtatca	gcactgttag	gccgtatgcc	720
atcagcagta	ggttaccaac	caacattggc	tgaagagatg	ggtgttctgc	aagaacgtat	780
cacttcaacc	aaaacagggt	caatcacctc	t			811

<210> 336
 <211> 806
 <212> DNA
 <213> *Providencia alcalifaciens* ATCC 9886

<400> 336						
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agtcggtaaa	gcaactctgg	gacgtatcat	gaacgttctg	ggtgaaccaa	tcgacatgaa	240
aggtgatatc	ggcgaagaag	agcgtcggtc	tattcacctg	gctgcaccaa	gctacgaaga	300

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attagctaac tcaactgaac tgctggaaac cggtatcaaa gtaatggact taatctgtcc 360
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catgatggaa ctgatccgta acatcgcgat tgagcactca ggttactcag tggtcgctgg 480
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gctgttcgtt gacaacattt atcggttatac actggcagggt actgaagtat cagcactgtt 720
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<210> 337
 <211> 830
 <212> DNA
 <213> Providencia rettgeri ATCC 9250

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ggtacatcag atggcctgag ccgtggttta gaagttgtaa acttagagca cccaattgaa 180
gtaccagtag gtaaagcaac tttaggacgt atcatgaacg ttctgggtca gcctattgat 240
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ctgttaggtc gtatgccttc agcggtaggt tatcagccaa cgctggcgga agagatgggt 780
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<210> 338
 <211> 812
 <212> DNA
 <213> Providencia rustigianii ATCC 33673

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gttgacaaca tttatcggtt tacactggca ggtactgaag tatcagcact gttagggtcgt 720
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cgtatcactt ctacaaaaac cggttctatc ac 812

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<210> 339
 <211> 819
 <212> DNA
 <213> Providencia stuartii ATCC 33672

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atcagatggc ctaagccgtg gtttagaagt taaaaattta gaacacccaa ttgaagtacc 180
agtaggtaaa gcaacactcg gacgtatcat gaacgttctg ggtgacccta ttgatatgaa 240
aggtgatatc ggcgaagaag agcgttggtc tattcaccgc gctgcaccaa gctacgaaga 300

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tggtgggtgag	cgtacccgtg	aaggtaacga	cttctatcat	gaaatgacag	attcaaacgt	540
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gttggttcgtg	gataacatct	atcggttatac	actggcaggt	acagaagtat	cggctctgtt	720
aggtcgtatg	ccatcagcag	taggttatca	gccaacattg	gcagaagaga	tgggtgttct	780
tcaagaacgt	atcacttcta	ctaagacagg	ttctatcac			819

<210> 340

<211> 857

<212> DNA

<213> *Psychrobacter phenylpyruvicus* ATCC 23333

<400> 340

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gaaggtctta	agcgtgggtt	accagtaaca	aacactgggt	ccccaattac	agttccagta	180
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gctaacagta	ctgacctatt	agagacaggt	attaaagtaa	ttgacttact	ttgtccggtc	360
gctaaagggg	gtaaagttgg	tctgttcggt	ggtgcgggtg	ttggtaaaac	cgtaaaccatg	420
atggaattga	ttaataacat	cgctcttaag	cactcaggtt	tatcagtatt	cgctgggtgtg	480
ggtgagcgtg	ctcgtgaagg	taacgacttc	taccacgaga	tgcaagaagc	gggtgttgtt	540
gacgttgaaa	acttcaccaa	ctcaaaagtt	gcgatgggtt	atggtcagat	gaatgagcca	600
ccaggttaacc	gtttacgtgt	tgcgtttaacc	ggtctgacta	tggttgagta	cttccgtgat	660
caaaaagatg	aaaacggtaa	aggtaaagac	gttctattat	tcgttgataa	catctaccgc	720
tacacgctag	ccggtactga	agtatcagca	cttctaggtc	gtatgccatc	agcagtaggt	780
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<210> 341

<211> 832

<212> DNA

<213> *Rahnella aquatilis* DSM 4594

<400> 341

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gggtacctca	gacggcctgc	gtcgcggtct	gaaagtgaac	aacctggaac	acccaattga	180
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gtgtccggtc	gctaagggcg	gtaaagttgg	tctgttcggt	ggtgcgggtg	taggtaaaac	420
tgtgaacatg	atggagctga	tccgtaacat	tgcgatcgag	cactccggtt	attctgtgtt	480
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acttctgggc	cgtatgccat	cggcggtagg	ttatcagcca	acgctggcgg	aagagatggg	780
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<210> 342

<211> 824

<212> DNA

<213> *Salmonella choleraesuis* subsp. *arizonae* ATCC 13314

<400> 342

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gggtcttctg	acggtctgcg	tcgcggtctt	gatgtaaaag	atctcgaaca	cccgatcgaa	180
gtcccggtag	gtaaagccac	gctgggtcgt	atcatgaacg	tcctgggcga	accggtcgat	240

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tgtccgttcg cgaagggcgg taaagtcggt ctgttcgggt gcgcgggtgt aggtaaaacc 420
gtaaacatga tggagcttat ccgtaacatc gcgatcgagc actccggtta ctctgtgttt 480
gcgggcgtag gtgaacgtac tcgtgagggt aacgacttct accacgaaat gaccgactct 540
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gttctgctgt tcgtcgacaa catctaccgt tataccctcg ccggtacgga agtatccgca 720
ctgctgggtc gtatgccttc cgcggtaggt taycasccga ctctggcgga agagatgggc 780
gttctgcagg aacgtatcac ctccaccaa accggttcta tcac 824

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<210> 343

<211> 820

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 7001

<400> 343

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gacggctctgc gtcgcggtct ggatgtaaaa gatctcgaac acccgatcga agtcccggta 180
ggtaaagcca cgctgggtcg tatcatgaac gtcctgggcg aaccggtcga catgaaaggc 240
gagatcggcg aagaagagcg ttgggcgatt caccgcgcag caccttccta cgaagagttg 300
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gcactgaccg gcctgaccat ggcggagaaa ttccgtgacg aaggtcgtga tgtactgctg 660
ttcgtcgata acatctatcg ttacaccctg ccggtacgga aagtatccgc actgctgggc 720
cgtatgcctt ccgcagtagg ttaccagccg actctggcgg aagagatggg cgttctgcag 780
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<210> 344

<211> 831

<212> DNA

<213> *Salmonella choleraesuis* subsp. *diarizonae* ATCC 43973

<400> 344

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gtaaacatga tggagcttat ccgtaacatc gcgatcgagc actccggtta ctctgtgttt 480
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<210> 345

<211> 831

<212> DNA

<213> *Salmonella choleraesuis* subsp. *houtenae* ATCC 43974

<400> 345

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<210> 346

<211> 829

<212> DNA

<213> *Salmonella choleraesuis* subsp. *indica* ATCC 43974

<400> 346

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<210> 347

<211> 817

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 9150

<400> 347

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<210> 348

<211> 806

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 8759

<400> 348

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<210> 349

<211> 831

<212> DNA

<213> *Salmonella choleraesuis* subsp. *salamae* ATCC 43972

<400> 349

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gggtcttctg	acggtctg	tcgkgtctg	gatgtaaaag	atctcgaaca	cccgatcgaa	180
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gcggg	gtgaacgtac	tcgtgagggt	aacgacttct	accacgaaat	gaccgactcc	540
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<210> 350

<211> 823

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 10749

<400> 350

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gggtcttctg	acggtctg	tcgcggtctg	gatgtaaaag	atctcgaaca	cccgatcgaa	180
gtcccggtag	gtaaagctac	gctgggtcgt	atcatgaacg	tccgtgggcga	accggtcgac	240
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tgtccgttgc	cgaaggcg	taaagtcggt	ctgttcggtg	gtgcgggtgt	aggtaaaacc	420
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<210> 351

<211> 823

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 14028

<400> 351

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gggtcttctg	acggtctg	tcgcggtctg	gatgtaaaag	atctcgaaca	cccgatcgaa	180
gtcccggtag	gtaaagctac	gctgggtcgt	atcatgaacg	tccgtgggcga	accggtcgac	240

atgaaaggcg	agatcggcga	agaagagcgt	tggggcgattc	accgcgcagc	gccttccctac	300
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gtactgctgt	tcgtcgataa	catctatcgt	tacaccctgg	ccggtacgga	agtatccgca	720
ctgctgggtc	gtatgccttc	cgcggttaggt	taccagccga	ctctggcgga	agagatgggc	780
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<210> 352

<211> 810

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 51955

<400> 352

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ggtctgcgtc	gcggtctgga	tgtaaaagat	ctcgaacacc	cgatcgaagt	cccggtaggt	180
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atcggcgaag	aagagcgttg	ggcgattcac	cgcgcgagcac	cttcctacga	agagttgtca	300
aactctcagg	aactgctgga	aaccggatc	aaagtattcg	acctgatgtg	tccgttcgcg	360
aagggcggtta	aagtccgtct	gttcgggtgg	gcgggtgtag	gtaaaaccgt	aaacatgatg	420
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atgccttccg	cagtaggtta	ccagccgact	ctggcggaag	agatgggcgt	tctgcaggaa	780
cgtatcacct	ccaccaaacc	cggttctatc				810

<210> 353

<211> 820

<212> DNA

<213> *Serratia ficaria* ATCC 33105

<400> 353

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gacgggtctgc	gtcgcgggtct	gaaagtgaac	aacctggaac	acccgattga	agtgccgggtg	180
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gagatcggcg	aagaagagcg	ttggggcgatt	caccgtcctg	cgccaagcta	cgaagagctg	300
tccaactccc	aggacctgct	ggaaaaccgt	atcaaggtaa	tggacctgat	ttgtccgttc	360
gccaagggcg	gtaaagtccg	tctgttcggt	ggtgcggggcg	tgggcaaaac	cgtaaaccatg	420
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ttcgttgaca	acatttaccg	ttacaccctg	gccgggtaccg	aagtgtccgc	acttctgggc	720
cgtatgccat	ccgcggtagg	ttatcagcca	acgctggcgg	aagagatggg	cgttctgcaa	780
gaacgtatca	cctcgaccaa	gaccggttcc	atcacctccg			820

<210> 354

<211> 816

<212> DNA

<213> *Serratia fonticola* ATCC 29844

<400> 354

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gacgggtctgc	gtcgtgggtct	ggccgtaacc	gacctgcagc	acccaattga	agtaccggta	180
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gacatcggcg	aagaagaacg	ttgggctatt	caccgccctg	cgccaagcta	cgaagagctg	300
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gccaaaggtg	gtaaagtgtg	tctgttcggt	ggtgctggtg	taggtaaaaac	cgtaaacatg	420
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ttcgtcgata	acatctaccg	ttataccctg	gccggtaccg	aagtgtccgc	acttctgggc	720
cgtatgccat	cggcggtagg	ttatcagcca	acgctggcgg	aagagatggg	tgttctgcaa	780
gaacgtatca	cctctaccaa	gactggttca	atcacc			816

<210> 355
 <211> 822
 <212> DNA
 <213> *Serratia grimesii* ATCC 14460

<400> 355						
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gatggtctgc	gtcgcggtct	gaaagtcaca	gacctggacc	acccaattga	agtaccggta	180
ggtaaagcta	ctctgggccc	tatcatgaac	gtattgggtg	aaccaatcga	catgaagggc	240
gatatcggcg	aagaagaacg	ttgggcgatt	caccgtccgg	cgccaagcta	cgaagatttg	300
gccaaactccc	aggatctgct	ggaaaccggt	atcaaggtaa	tggacctgat	ctgcccgttc	360
gccaaaggtg	gtaaagtcgg	tctgttcggt	ggtgcgggtg	ttggtaaaac	cgtaaacatg	420
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ttcgttgata	acatctaccg	ttataccctg	gccggtaccg	aagtgtccgc	acttctgggc	720
cgtatgccat	cggcggtagg	ttatcagcca	acgctggcgg	aagagatggg	tgttctgcaa	780
gaacgtatca	cctctaccaa	gactggttca	atcacctccg	ta		822

<210> 356
 <211> 819
 <212> DNA
 <213> *Serratia liquefaciens* ATCC 27592

<400> 356						
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tcgttgataa	catttaccgt	tataccctgg	ccggtaccga	agtgtccgca	cttctggggc	720
gtatgccatc	tgcggtagg	tatcagccaa	cgtggcggga	agagatgggc	gttctgcaag	780
aacgtatcac	ctctaccaag	accggttcta	tcacttccg			819

<210> 357
 <211> 805
 <212> DNA
 <213> *Serratia marcescens* ATCC 13880

<400> 357						
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ctccgacggt	ctgcgtcgcg	gtctgaaagt	gaacaacctg	gaccaccgga	ttgaagtgcc	180
ggtgggtaaa	gctaccctgg	gtcgtatcat	gaacgtattg	ggtcaaccga	tcgacatgaa	240

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aggcgacatc  ggcaagaag  agcgttgggc  gattcaccgc  gcggcgccaa  gctacgaaga  300
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gttcgccaag  ggcggtaaag  tcggtctgtt  cggcggtgcg  ggcgtaggta  aaaccgtaaa  420
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cgtgggcgag  cgtactcgtg  agggtaacga  cttctaccac  gaaatgaccg  actccaacgt  540
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gctgttcgtt  gacaacatct  accgttacac  cctggccggg  accgaagtgt  ccgcacttct  720
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<210> 358
 <211> 822
 <212> DNA
 <213> *Serratia odorifera* ATCC 33077

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gacggtttgc  gtcgcggcct  gaaagtgaac  gatctgcaac  acccaatcga  agtcccgggt  180
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ggtgagcgta  ctctgtaggg  taacgacttc  taccacgaaa  tgaccgactc  caacgtactg  540
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<210> 359
 <211> 805
 <212> DNA
 <213> *Serratia plymuthica* ATCC 183

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<210> 360
 <211> 831
 <212> DNA
 <213> *Serratia rubidaea* ATCC 27593

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ggtacttccg  acggtctgcg  tcgcggtctg  aaagttaacg  acctcgagca  cccaatcgaa  180
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tgcccgttcg ccaagggtgg taaagttggt ctgttcgggt gtgcgggctg aggtaaaacc 420
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<210> 361
 <211> 831
 <212> DNA
 <213> *Pseudomonas putida* strain LCDC7172

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ggttcctccg acgggtctgcg tcgcggtctg gatgtaaaag acctcgaaca cccgatcgaa 180
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ctgctgggcc gtatgccttc agcggtaggt tatcagccga ccctggcgga agagatgggc 780
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<210> 362
 <211> 831
 <212> DNA
 <213> *Shigella boydii* ATCC 9207

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gtaaaccatga tggagctcat tcgtaacatc gcgacgcagc actccgggta ctctgtgttt 480
gcgggcgtag gtgaacgtac tctgtagggt aacgacttct accacgaaat gaccgactcc 540
aacgttatcg acaaagtatc cctggtgtat ggccagatga acgagccgcc gggaaaccgt 600
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<210> 363
 <211> 802
 <212> DNA
 <213> *Shigella dysenteriae* ATCC 11835

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aaagcgactc tgggcccgtat catgaacgta ctgggtgaac cggtcgacat gaaaggcgag 240

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atcgggtgaag	aagagcggttg	ggctattcac	cgcgcgagcac	cttcctacga	agagctgtca	300
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atgccttcag	cggtaggtta	tcagccgacc	ctggcggaag	agatgggcgt	tctgcaggaa	780
cgtatcacct	ccacaaaaac	cg				802

<210> 364

<211> 819

<212> DNA

<213> *Shigella flexneri* ATCC 12022

<400> 364

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acgggtctgcg	tcgcgggtctg	gatgtaaaag	acctcgaaca	cccgatcgaa	gtcccggtag	180
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tcgttgacaa	catctatcgt	tacaccctgg	cgggtacgga	agtatccgca	ctgctgggcc	720
gtatgccttc	agcggtaggt	tatcagccga	ccctggcgga	agagatgggc	gttctgcagg	780
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<210> 365

<211> 802

<212> DNA

<213> *Shigella sonnei* ATCC 29930

<400> 365

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atcacctcca	ccaaaactgg	tt				802

<210> 366

<211> 785

<212> DNA

<213> *Staphylococcus aureus*

<400> 366

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ccaaagaggc	atggatgtaa	aagatacagg	caaagaaatt	agtgtacctg	ttggtgatga	180
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agggtggtaaa	atcggattgt	tccgttggtgc	cgggtgtaggt	aaaacagtat	taatccaaga	420
attaattaac	aacatcgctc	aagagcacgg	tggtatttct	gtattcgccg	gtgtaggtga	480
acgtactcgt	gaaggtaacg	atltatactt	cgaaatgagt	gatagtgggt	taattaagaa	540
aacagccatg	gtattcgggc	aaatgaatga	gccacctggg	gcacgtatgc	gtgttgcat	600
atctggttta	acaatggctg	aataatttccg	tgacgaacaa	ggtcaagacg	tattattatt	660
catcgataac	atlttcagat	ttacacaagc	tggttctgag	gtatctgcat	tattaggtcg	720
tatgccttct	gcagtaggtt	accaaccaac	acttgctact	gaaatgggac	aattacaaga	780
acgta						785

<210> 367
 <211> 843
 <212> DNA
 <213> *Staphylococcus auricularis* ATCC 33753

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attgcaatgg	attcaactga	tggtgtttaa	cgtggtaacg	aagtcaaaga	tactggtaat	180
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acaattgatt	tagaagataa	acttgatgat	tctgcgcgac	gtgaccctat	acatagagaa	300
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gttggtaaaa	ccgttttaat	ccaagaatta	atcaacaaca	tcgctcaaga	acacgggtgt	480
atltcagtc	ttgccggtgt	agggtgaacgt	acacgtgaag	gtaacgactt	gtactatgaa	540
atgagcgaca	gtgggtgta	caagaaaaa	gccatggctt	tcggacaaat	gaacgaacca	600
cctggcgcac	gtatgcgtgt	tgctttatct	ggtttaacaa	tggttgaaat	tttccgtgat	660
gaacaaggac	aagacgtatt	gttatttcac	gacaatat	tccgtttcac	acaagccggt	720
tcagaagttt	ctgccttact	agggtcggtt	ccatcagccg	ttggttatca	acctacatta	780
gcaacagaaa	tggtgacaatt	acaagaacgt	attacttcaa	caacaaaagg	atcagttact	840
tca						843

<210> 368
 <211> 849
 <212> DNA
 <213> *Staphylococcus capitis* subsp. *capitis* ATCC 27840

<400> 368						
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gagaacaact	cgattttagat	gaaaagattg	atgattcagt	acgtcgtgat	cctattcata	300
gacaggcacc	tggtctcgat	gaattatcta	ctaaagtaga	aatcttagaa	acaggtatca	360
aagtagtaga	cttattagca	ccttacatta	aaggtggtaa	aattggatta	ttcgggtggg	420
ccggtgttgg	taagacagtt	ttaatccaag	aacttatcaa	taatatcgct	caagagcatg	480
gtggtatttc	agtattcgcc	ggtgttggtg	aacgtacacg	tgaaggtaac	gacctttact	540
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agccacctgg	tgctcgtatg	cgtgttgcat	tatcagggtt	aacaatggca	gaatatttcc	660
gtgatgaaga	aggccaagac	gtattattat	tcattgataa	tatcttcaga	ttcacacaag	720
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ttacttcaa						849

<210> 369
 <211> 830
 <212> DNA
 <213> *Staphylococcus cohnii* DSM 20260

<400> 369						
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gattcaactg	atggtgttaa	acgtggtaca	gaagttagag	atagcggaaa	tagtatcagc	180
gtaccagttg	gtaatgaaac	attaggtaga	gtattttaatg	tattaggtga	tacgatagat	240
ttagatgaag	acatagatga	ctcagtgcg	cgtgacccaa	ttcatagaga	agcacctgca	300
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ttagcaccat	atatcaaagg	tggtaaaagt	ggattattcg	gtggtgccgg	tggtggtaaa	420
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agtggtgtta	ttaaaaagac	agctatggta	tttggacaaa	tgaacgaacc	acctggtgcg	600
cgtatgagag	tagcactttc	tggtttaaca	atggctgaat	atttccggga	tgaacaagga	660
caagatgttc	tattattcat	agataacatc	tttagattta	ctcaagctgg	ttcagaagtt	720
tctgcgttat	taggtcgtat	gccttcagct	gttggttacc	aaccaacgtt	agcaactgaa	780
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<210> 370

<211> 787

<212> DNA

<213> *Staphylococcus epidermidis* ATCC 14990

<400> 370

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gttcaaagag	gaatggaagt	taaagataca	ggtagagaca	taagtgtacc	tgctcggtag	180
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gatgattcag	tacgacgtga	ccctatccat	agacaagctc	caggattcga	cgaattatca	300
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aaaggtggta	aaattggatt	atttggtggt	gccggtgtag	gtaaaaccgt	actaatccaa	420
gaacttatta	ataacatcgc	tcaagaacac	gggtggtatct	cagtattcgc	tggtggttgg	480
gaacgtacac	gtgaaggtaa	tgatctttac	tatgaaatga	gtgacagtgg	tggttatcaa	540
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<210> 371

<211> 830

<212> DNA

<213> *Staphylococcus haemolyticus* ATCC 29970

<400> 371

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ttagaagata	aattagatgg	ttcagtaaga	cgtgatccaa	ttcatagaca	atcacctaac	300
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agtggtgtta	ttaagaaaac	agcaatggta	tttgggtcaa	tgaacgagcc	acctggtgca	600
cgtatgcgtg	tggtcactttc	tgcatgtgac	atggctgagt	atttccgtga	tgaacaagga	660
caagacgttc	tggtattcat	cgataacatt	ttcagattta	ctcaagcagg	ttcagaagta	720
tcagcattat	tggtgacgtat	gccttcagct	gtagggttatc	aacctacttt	agctacagaa	780
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<210> 372

<211> 846

<212> DNA

<213> *Staphylococcus hominis* subsp. *hominis* ATCC 27844

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ctattgcaat ggattcaact gatggtgttc aacgtgggtat gcaagttgtg aatactggta 180
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gcgtaggtaa aactgtatta attcaagaat taatcaataa tatcgctcaa gaacatgggtg 480
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gttctgaagt ttcagcatta ttaggacgta tgccttcagc tgtaggttat caacctacat 780
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<210> 373
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 <212> DNA
 <213> *Staphylococcus hominis* strain CSG 175

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gcgtaggtaa aactgtatta attcaagaat taatcaataa tatcgctcaa gaacatgggtg 480
gtatttctgt attcgctggg gtaggtgaac gtactcgtga aggtaacgat ttatactatg 540
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846

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<210> 374
 <211> 835
 <212> DNA
 <213> *Staphylococcus lugdunensis* ATCC 43809

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caatggattc aactgatggc gttcaacgtg gtatggaagt tcaaaacaca ggtaaagaca 180
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ctaaatttga tgaattatct acagaagtag aaattcctga aactgggtatt aaagttggtg 360
atttatttag accatatatt aaaggttgga aagttggatt gtttgggtggg gccggagtag 420
gtaaaacggg attaatcaaa gaattaatca acaatattgc tcaagaacat ggtggtattt 480
ctgtgtttgc cggagtaggt gaaacgtacg gtgaaggtaa tgacttata tatgaaatga 540
gcgatagtgg cgtaattaag aaaacagcga tggattttgg ccaaataaat gaaccacctg 600
gtgcacgtat gagagttgcg ttatctgcct taacaatggc tgaatatttc cgtgacgagc 660
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aagtatctgc attacttgga cgtatgccat ctgccgttgg ttatcaacca acattggcta 780
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835

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<210> 375
 <211> 842
 <212> DNA
 <213> *Staphylococcus saprophyticus* ATCC 15305

<400> 375

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<210> 376

<211> 842

<212> DNA

<213> Staphylococcus simulans ATCC 27848

<400> 376

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ta						842

<210> 377

<211> 841

<212> DNA

<213> Staphylococcus warneri ATCC 27836

<400> 377

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<211> 846

<212> DNA

<213> Streptococcus acidominimus ATCC 51726

<400> 378

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<213> Streptococcus agalactiae ATCC 12403

<400> 379

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<211> 846

<212> DNA

<213> Streptococcus agalactiae ATCC 13813

<400> 380

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 <213> Streptococcus agalactiae ATCC 12973

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 <213> Streptococcus agalactiae ATCC 27591

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<210> 383
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 <212> DNA
 <213> Streptococcus agalactiae strain CDCss-1073

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catca

845

<210> 384
<211> 845
<212> DNA
<213> Streptococcus dysgalactiae ATCC 43078

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<210> 385
<211> 846
<212> DNA
<213> Streptococcus equi subsp. equi ATCC 9528

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<212> DNA
<213> Streptococcus anginosus ATCC 27335

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 <212> DNA
 <213> Streptococcus salivarius ATCC 7073

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 <213> Streptococcus suis ATCC 43765

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 <213> Streptococcus uberis ATCC 19436

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<210> 390

<211> 846

<212> DNA

<213> *Tatumella ptyseos* ATCC 33301

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<210> 391

<211> 829

<212> DNA

<213> *Trabulsiella guamensis* ATCC 49490

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<210> 392

<211> 835

<212> DNA

<213> *Yersinia bercovieri* ATCC 43970

<400> 392

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<211> 812
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<213> *Yersinia enterocolitica* ATCC 9610

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<211> 802
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<213> *Yersinia frederiksenii* ATCC 33641

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<212> DNA
<213> *Yersinia intermedia* ATCC 29909

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<210> 396
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 <213> *Yersinia pseudotuberculosis* ATCC 29833

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<210> 397
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 <212> DNA
 <213> *Yersinia rohdei* ATCC 43380

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 <212> DNA
 <213> *Yokenella regensburgei* ATCC 35313

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<210> 399

<211> 1097

<212> DNA

<213> *Yarrowia lipolytica* ATCC 38295

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<210> 400

<211> 1233

<212> DNA

<213> *Absidia corymbifera* ATCC 46775

<220>

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<222> (974)..(974)

<223> n may be any nucleotide

<400> 400

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<210> 401

<211> 1151

<212> DNA

<213> *Alternaria alternata* ATCC 62099

<400> 401

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<211> 1283

<212> DNA

<213> *Aspergillus flavus* ATCC 26947

<400> 402

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<210> 403

<211> 1103

<212> DNA

<213> *Aspergillus fumigatus* strain DAL-95

<400> 403

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<210> 404

<211> 1149

<212> DNA

<213> *Aspergillus fumigatus* strain WSA-172

<400> 404

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<211> 1151

<212> DNA

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 <213> *Blastoschizomyces capitatus* ATCC 10663

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 <211> 1101
 <212> DNA
 <213> *Candida albicans* ATCC 10231

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<210> 408
 <211> 1089
 <212> DNA
 <213> *Candida albicans* ATCC 18804

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 <213> *Candida albicans* ATCC 56884

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<210> 410
 <211> 1102
 <212> DNA
 <213> *Candida albicans* ATCC 60193

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tactgggtgaa ttcgaagccg gtatttctaa ggatgggtcaa accagagaac acgctttgtt 240
ggcttacact ttgggtgtca aacaattgat tgttgctgtc aacaagatgg actctgtcaa 300
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gattgaacca	tccaccaact	gtccatggta	caagggttgg	gaaaaggaaa	ccaaatccgg	480
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<210> 411

<211> 1102

<212> DNA

<213> Candida albicans ATCC 90028

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<210> 412

<211> 1101

<212> DNA

<213> Candida dubliniensis strain NCPF 3108

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<210> 413
<211> 1098
<212> DNA
<213> Candida catenulata ATCC 10565

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<210> 414
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<212> DNA
<213> Candida dubliniensis strain NCPF 3949

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<213> Candida dubliniensis CBS 7987

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 <212> DNA
 <213> Candida glabrata ATCC 66032

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<211> 1080
<212> DNA
<213> *Candida guilliermondii* ATCC 6260

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<213> *Candida haemulonii* ATCC 22991

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<211> 1102
<212> DNA
<213> *Candida inconspicua* ATCC 16783

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<210> 421

<211> 1099

<212> DNA

<213> Candida kefyr ATCC 28838

<400> 421

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<211> 1095

<212> DNA

<213> Candida krusei ATCC 34135

<400> 422

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1095

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<212> DNA
<213> Candida lusitaniae ATCC 66035

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<213> Candida norvegensis ATCC 22977

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cggttaagatg	gttccaacca	agccaatgtg	tgttgaagct	ttcactgaat	acccaccatt	1080
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<210> 426

<211> 1095

<212> DNA

<213> *Candida parapsilosis* ATCC 90018

<400> 426

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caccttgggt	gttaagcaat	tgattgttgc	catcaacaag	atggactcag	tcaaattggga	300
caagaacaga	tacgaagaaa	ttgtcaagga	aacttccaac	ttcgtcaaga	agggttggtta	360
caaccctaaa	gctgtcccat	tcgtcccaat	ctctgggttg	aacggtgaca	atatgattga	420
accatcaacc	aactgtccat	ggtacaaggg	ttgggaaaag	gaaactaaag	ctggtaaggt	480
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gatggtccca	accaagccaa	tgtgtgttga	agcttttact	gactaccac	cattgggaag	1080
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<210> 427

<211> 752

<212> DNA

<213> *Candida rugosa* ATCC 96275

<400> 427

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<210> 428
 <211> 1093
 <212> DNA
 <213> *Candida sphaerica* ATCC 2504

<400> 428
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 tgattactgg tacttctcaa gctgactgtg ctatcttgat tattgctggg ggtgtcgggtg 180
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 ccttgggtgt tagacaattg attgttgctg ttaacaagat ggattccgtt aagtgggatg 300
 aatctcgttt ccaagaaatt gtcaaggaaa cctctaactt catcaagaag gtcggttaca 360
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 ccaccaccaa tgcttcatgg tacaagggtt gggaaaagga aaccaagtcc ggtgtcgtca 480
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 agccattgag attgccattg caagatgtct acaagattgg tggatcgga actgtgccag 600
 tcggtagagt cgaaaccggg gttatcaagc caggtatgat tgttaccttt gccccagccg 660
 gtgttactac tgaagttaag tccgtcgaaa tgcaccacga acaattggaa gaaggtctac 720
 caggtgacaa cgctcggtttc aacgtcaaga acgtttccgt taaggaaatc agaagaggta 780
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 acactgctca cattgcttgt aagttcgacg aattgttggg aaagaacgat agaagatccg 960
 gtaagaagtt ggaagactct ccaaagttct tgaagtccgg tgatgctgct ttggttaagt 1020
 tcgttccatc taagccaatg tgtgttgaag ctttctctga ctaccacact ctaggtagat 1080
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<210> 429
 <211> 1094
 <212> DNA
 <213> *Candida tropicalis* ATCC 13803

<400> 429
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 actccaaaat accacgttac cgttattgat gctccagggtc acagagattt catcaagaac 120
 atgattactg gtacttccca agctgattgt gctattttga ttattgctgg ttgtactggg 180
 gaattcgaag ctgggtatttc taaagatggg caaaccagag aacacgcttt gttggcttac 240
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 aaaaacagat ttgaagaaat tatcaaggaa acttctaact tcgtcaagaa ggttggttac 360
 aaccctaagg ctgttccatt cgttccaatc tctggttgga atggtgacaa catgattgaa 420
 gcttctacca actgtccatg gtacaagggt tgggaaaaag aaaccaaggc ttgtaagggt 480
 accggttaaga ctttgttgga agccattgat gctattgaac caccttcaag accaactgac 540
 aagccattga gattgccatt gcaagatgtt tacaagattg gtggtattgg tactgtgcca 600
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 ggtgttacca ctgaagtcaa atccgtcgaa atgcaccacg aacaattggc tgaagggtgtc 720
 ccaggtgaca atgttgggtt caacgttaag aacgtttctg ttaaagaaat tagaagaggt 780
 aacgtttgtg gtgactccaa gaacgatcca ccaaagggtt gtgactcttt caacgctcaa 840
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 cacactgctc atattgcttg taaattcgac accttgggtg aaaagattga cagaagaact 960
 ggtaagaaat tggaagaaaa tccaaaattc gtcaaactcc gtgatgctgc tattgtcaag 1020
 atggttccaa ccaaaccaat gtgtgttgaa gctttcactg actaccaccc attaggtaga 1080
 ttcgctgtca gaga 1094

<210> 430
 <211> 1095
 <212> DNA
 <213> *Candida utilis* strain Csp 388

<400> 430
 caagcttaaa gctgagagag agagaggtat cactatcgac attgctctct ggaagttcga 60
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 catgattact ggtacctccc aggctgactg tgctattctt atcattgccg gtgggtgttg 180
 tgagttcgag gctggatatc ctaaggatgg tcagaccaga gagcacgctt tgctcgcttt 240
 cacccttggg gttagacaga tgattgttgc tatcaacaag atggactctg tcaagtggga 300
 cgagaagaga ttcgaggaga tcgttaagga gacctctaac ttcatcaaga aggttggtta 360

caacccaaag	actgttccat	ttgtcccaat	ttcyggttgg	aacggtgaca	acatgattga	420
ggcctctacc	aactgtccat	ggtacaaggg	ttgggagaag	gagaccaagg	ctgggtgtgt	480
caagggtaag	accttgctcg	atgccattga	cgccattgag	ccaccaacaa	gaccaactga	540
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cgggtgcacc	actgagggtt	agtccgtcga	gatgcaccac	gagcagcttg	ctgagggtat	720
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tcacaccgcc	cacattgctt	gtaagttctc	tgagcttttg	gagaagattg	acagaagatc	960
cggtaagtcc	cttgaggcct	ctccaaagtt	cgtaagctct	ggtgatgccg	ctatcgtcaa	1020
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attcgctgtc	agaga					1095

<210> 431

<211> 1085

<212> DNA

<213> Candida viswanathii ATCC 28269

<400> 431

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ggtactttctc	aagctgattg	tgctatyttg	attatcgctg	gtggtagctg	tgaattcgaa	180
gctgggtatyt	ctaaggatgg	tcaaaccaga	gaacacgctt	tggtggccta	caccttggtg	240
gtcaagcaat	tgattgttgc	tgtcaacaag	atggactctg	tcaaattggga	caagaacaga	300
ttcgaagaaa	tcatcaagga	aacctccaac	ttcgtcaaga	aggttgggtta	caacccaaag	360
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agaga						1085

<210> 432

<211> 1072

<212> DNA

<213> Candida zeylanoides ATCC 7351

<400> 432

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caaggagacc	tccaacttcg	tcaagaaggt	tggttacaac	cccaagactg	tccccctcgt	360
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taagttcatc	aagtccggtg	acgctgccat	cgtcaagatg	gttccttcca	agcccatgtg	1020
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<210> 433
<211> 751
<212> DNA
<213> *Coccidioides immitis* strain Silveira

<400> 433
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ccagtccttg actgccacac tgcccacatt gcttgcaagt tctccgagct cctcgagaag 660
atcgaccgcc gtaccggtaa atccgttgag aacaacccca agttcatcaa gtctgggtgat 720
gccgctatcg tcaagatggg tccatccaag c 751

<210> 434
<211> 1146
<212> DNA
<213> *Cryptococcus albidus* ATCC 66030

<400> 434
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ccgaga 1146

<210> 435
<211> 1095
<212> DNA
<213> *Exophiala jeanselmei* ATCC 64755

<400> 435
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ctctggcaag actctcctcg aggccatcga cgccatcgac cccccactc gtcccaccga 540
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<210> 436
 <211> 1113
 <212> DNA
 <213> *Fusarium oxysporum* strain WSA-212

<400> 436						
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cactgggtact	tcccaggccg	attgcgccat	tctcatcatt	gccgccggta	ctgggtgagtt	240
cgaggctggt	atctccaagg	atggccagac	ccgtgagcac	gctcttcttg	cctacaccct	300
tggtgtcaag	aacctcatcg	tgcctcatcaa	caagatggac	accaccaagt	ggtctgagggc	360
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ggctactgag	gccgccccca	agttcatcaa	gtctgggtgac	tccgccatcg	tcaagatggt	1080
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<210> 437
 <211> 726
 <212> DNA
 <213> *Geotrichum* spp. strain LEV-4

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aaccgcgtct	accgataagc	ccctccgtct	tccctccag	gatgtgtaca	aaatctctgg	300
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cccagtcctc	gactgccaca	ctgcccacat	tgcttgcaag	ttctctgagc	ttattgagaa	660
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<210> 439
 <211> 743
 <212> DNA
 <213> *Issatchenkia orientalis* ATCC 6258

<400> 439						
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gattgtcaca	ctgcccacat	tgcatgtaag	ttcgacgaat	taatcgaaaa	gattgacaga	660
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 <212> DNA
 <213> *Malassezia furfur* ATCC 42132

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<210> 441
 <211> 749
 <212> DNA
 <213> *Malassezia pachydermatis* ATCC 42756

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<400> 441
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aagtcggggca agggcactgg taagaccctt ctggacgcta ttgacgccat tgagccgccc 240
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atcgggtacyg tcccgggtcgg ccgtgttgag accggtgtta tcaagcccgg tatggttgtg 360
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ccrgtgctcg actgccacac tgcacacatt gcctgccgct tcaacaacat cctccagaag 660
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<210> 442
<211> 1150
<212> DNA
<213> Malbranchea filamentosa ATCC 48174

<400> 442
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cgtccgtgac                                     1150

<210> 443
<211> 1099
<212> DNA
<213> Metschnikowia pulcherrima DSM 70336

<400> 443
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gaacatgatc actggtactt cccaggctga ctgtgcyatc ttgattatcg cyggtggtgt 180
tggtgagttc gaggtgggta tctccaagga tggccagacc agagagcacg ctttgttggc 240
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caagatgggtg ccaaccaagc caatgtgtgt tgaggctttc accgactacc cacctttggg 1080
tagattcgcc gtcagagac 1099

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<212> DNA
<213> *Paecilomyces lilacinus* ATCC 42570

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<210> 445
<211> 763
<212> DNA
<213> *Paracoccidioides brasiliensis* ATCC 32071

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<210> 446
<211> 1346
<212> DNA
<213> *Penicillium marneffeii* ATCC 64101

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<210> 447
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<212> DNA
<213> Pichia anomala ATCC 18205

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<223> n may be any nucleotide

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<210> 448
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<212> DNA
<213> Pichia anomala ATCC 2149

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attgaaccat caactaactg tccatgggtac aaagggttga aaaaagaaac caaagctggg 480
gaagctaaag gtaaaacttt attagaagcc attgatgcta ttgatccacc atcaagacca 540

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 <213> *Pseudallescheria boydii* ATCC 44331

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 <213> *Rhizopus oryzae* ATCC 56015

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<210> 451
<211> 1292
<212> DNA
<213> *Rhodotorula minuta* ATCC 10658

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<210> 452
<211> 1289
<212> DNA
<213> *Sporobolomyces salmonicolor* ATCC 32311

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<210> 453
<211> 1070
<212> DNA
<213> *Sporothrix schenckii* strain WSA-148

<400> 453

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<210> 454

<211> 1092

<212> DNA

<213> *Stephanoascus ciferrii* ATCC 52550

<400> 454

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<210> 455

<211> 1149

<212> DNA

<213> *Trichophyton mentagrophytes* strain WSA-225

<400> 455

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<210> 456
<211> 1101
<212> DNA
<213> *Trichosporon cutaneum* ATCC 62965

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<210> 457
<211> 1085
<212> DNA
<213> *Wangiella dermatitidis* strain WSA-229

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<210> 458
<211> 492

<212> DNA
<213> *Aspergillus fumigatus* strain DAL-95

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<210> 459
<211> 1154
<212> DNA
<213> *Blastoschizomyces capitatus* ATCC 10663

<400> 459
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<210> 460
<211> 1295
<212> DNA
<213> *Candida albicans* ATCC 18804

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<210> 461
 <211> 1277
 <212> DNA
 <213> Candida dubliniensis strain NCPF 3949

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<210> 462
 <211> 1278
 <212> DNA
 <213> Candida famata ATCC 62894

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 <211> 1154
 <212> DNA
 <213> *Candida glabrata* ATCC 66032

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 <212> DNA
 <213> *Candida guilliermondii* ATCC 6260

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<210> 465
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 <212> DNA
 <213> *Candida haemulonii* ATCC 22991

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<210> 466

<211> 1111

<212> DNA

<213> Candida inconspicua ATCC 16783

<400> 466

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<210> 467

<211> 1283

<212> DNA

<213> Candida kefyr ATCC 28838

<400> 467

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<210> 468
 <211> 1287
 <212> DNA
 <213> Candida krusei ATCC 34135

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 <213> Candida lambica ATCC 24750

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<211> 1140

<212> DNA

<213> *Candida lusitaniae* ATCC 66035

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<210> 471

<211> 1296

<212> DNA

<213> *Candida norvegensis* ATCC 22977

<400> 471

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<210> 472

<211> 1297

<212> DNA

<213> *Candida parapsilosis* ATCC 90018

<400> 472

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<210> 473

<211> 1285

<212> DNA

<213> *Candida rugosa* ATCC 96275

<400> 473

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<210> 474

<211> 1283

<212> DNA

<213> *Candida sphaerica* ATCC 2504

<400> 474

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<210> 475

<211> 1290

<212> DNA

<213> *Candida tropicalis* ATCC 13803

<400> 475

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<210> 476

<211> 1267

<212> DNA

<213> *Candida utilis* strain Csp 388

<400> 476

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<210> 477
 <211> 1296
 <212> DNA
 <213> Candida viswanathii ATCC 28269

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<210> 478
 <211> 1295
 <212> DNA
 <213> Candida zeylanoides ATCC 7351

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<210> 479
<211> 534
<212> DNA
<213> *Coccidioides immitis* strain Silveira

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<210> 480
<211> 494
<212> DNA
<213> *Cryptococcus albidus* ATCC 66030

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<210> 481
<211> 415
<212> DNA
<213> *Fusarium oxysporum* strain WSA-212

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<210> 482
<211> 1281
<212> DNA
<213> *Geotrichum* spp. strain LEV-4

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<210> 483
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 <212> DNA
 <213> *Histoplasma capsulatum* strain G186A5

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<400> 483
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<210> 484
 <211> 1145
 <212> DNA
 <213> *Malassezia furfur* ATCC 42132

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<211> 1261
<212> DNA
<213> *Malassezia pachydermatis* ATCC 42756

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<210> 486
<211> 1282
<212> DNA
<213> *Metschnikowia pulcherrima* DSM 70336

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<210> 487
<211> 482
<212> DNA

<213> *Penicillium marneffei* strain WSA-214

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tc 482

<210> 488

<211> 1290

<212> DNA

<213> *Pichia anomala* ATCC 18205

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<210> 489

<211> 1291

<212> DNA

<213> *Pichia anomala* ATCC 2149

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<210> 490

<211> 508

<212> DNA

<213> *Rhodotorula minuta* ATCC 10658

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<210> 491

<211> 686

<212> DNA

<213> *Rhodotorula mucilaginosa* ATCC 66034

<400> 491

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<210> 492

<211> 625

<212> DNA

<213> *Sporobolomyces salmonicolor* ATCC 32311

<400> 492

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<210> 493

<211> 1211

<212> DNA
<213> *Sporothrix schenckii* strain WSA-148

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<213> *Stephanoascus ciferrii* ATCC 52550

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<210> 495
<211> 608
<212> DNA
<213> *Trichophyton mentagrophytes* strain WSA-225

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cgtgaaggaa acgatctcta ccatgaaatg caggagaccg gtgtcattca gtgtgatggc 240
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<210> 496
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<212> DNA
<213> Wangiella dermatitidis strain WSA-229

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<211> 1148
<212> DNA
<213> Yarrowia lipolytica ATCC 38295

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<210> 498
<211> 966
<212> DNA
<213> Aspergillus fumigatus strain WSA-172

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<210> 499

<211> 846

<212> DNA

<213> *Blastoschizomyces capitatus* ATCC 10663

<400> 499

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<210> 500

<211> 846

<212> DNA

<213> *Candida rugosa* ATCC 96275

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<210> 501

<211> 944

<212> DNA

<213> *Coccidioides immitis* strain Silveira

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<210> 502
<211> 849
<212> DNA
<213> *Fusarium oxysporum* strain WSA-212

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<210> 503
<211> 1064
<212> DNA
<213> *Histoplasma capsulatum* strain G186A5

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<212> DNA
<213> *Paracoccidioides brasiliensis* ATCC 32071

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<211> 931
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<213> *Penicillium marneffeii* ATCC 58950

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<211> 846
<212> DNA
<213> *Pichia anomala* ATCC 18205

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<211> 964

<212> DNA

<213> Trichophyton mentagrophytes strain WSA-225

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<210> 508

<211> 844

<212> DNA

<213> Yarrowia lipolytica ATCC 38295

<400> 508

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cacatcccta	cccctaaccg	tgaccttgag	aagcccttcc	tgatgccgt	tgaggacgtt	360
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gacaacactg	agatgggttct	cgagcttggt	caccctaccg	ccattgagggt	caaccagcga	840
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<210> 509

<211> 1067

<212> DNA

<213> Babesia bigemina strain Suarez-2

<400> 509

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taagaacatg attacgggta cctcccaggc cgatgttgct atgcttgctg tgccccccga 180
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ggttgagcgc tccaccaaca tgccgtggta caagggcaag accttggtcg aggccctcga 480
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```

<210> 510

<211> 1049

<212> DNA

<213> Babesia bovis strain Suarez-3

<400> 510

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aggtgccctt cgttgccatc tccggtttca tgggagacaa catggttgag cgttccacca 420
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ctgccatggt tgtgctcaag ccaatgaagc ccatggttgt cgaatccttc actgagtatg 1020
ctcctcttgg tcgtttcgtg gttcgtgac 1049

```

<210> 511

<211> 1070

<212> DNA

<213> Crithidia fasciculata ATCC 11745

<400> 511

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aggccatcaa gtccggcgat gcgcccatcg tgaagatgat cccgcagaag ccgatgtgcg 1020
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<210> 512
 <211> 1052
 <212> DNA
 <213> *Entamoeba histolytica* strain HM1-IMMS

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<400> 512
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tatgaagaaa ttaagaaaga aattagtgc ttccttaaga agacwggata taatccagac 360
aagattccat ttgtcccaat ttcaggattc caaggagata atatgattga accatcaacc 420
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gaaagaccag ttgataaacc acttagactt ccacttcaag atgtttayaa gatttcagggt 540
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gattcagcac ttgttaagat tgttccaact aaaccacttt gtgttgaaga atttgctaaa 1052
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<210> 513
 <211> 1082
 <212> DNA
 <213> *Giardia lamblia* strain Faubert-1

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<400> 513
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gagcgctacg acgagatcaa gggcgagatg atgaagcagc tcaagaacat cggctggaag 360
aaggccgagg agttcgacta catcccgcag tccggctgga tcgacgcat cgacgggctc 480
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aaggccccga agcgccccgac cgacaagccc ctccgcctcc cgatccagga cgtctacaag 540
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gg 1082

```

<210> 514
 <211> 1098
 <212> DNA
 <213> *Leishmania tropica* ATCC 30816

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<400> 514
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acatgcgcca aaccgttg 1098
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<210> 515
<211> 1104
<212> DNA
<213> Leishmania aethiopica ATCC 50119

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gagaagaacc ccaaggcgat caagtctggc gatgccgcga tcgtgaagat ggtgccgcag 1020
aagccgatgt gcgtggagggt gttcaacgac tacgcgccgc tgggccgctt tgccgtgcgc 1080
gacatgcgcc aaaccgttgc cgtc 1104
```

<210> 516
<211> 1106
<212> DNA
<213> Leishmania tropica ATCC 30815

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aactcgaaga	acgacccgcc	gaaggaggcg	gccgacttca	cggcgaggt	gatcgtgctg	840
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<210> 517
 <211> 1099
 <212> DNA
 <213> Leishmania donovani ATCC 50212

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gacatgcgcc	aaaccgttgc					1099

<210> 518
 <211> 1098
 <212> DNA
 <213> Leishmania infantum strain MOU

<400> 518						
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attgcgtgcc	gcttcgcgga	aatcgagtc	aagatcgacc	gccgctccgg	caaggagctg	960
gagaagaacc	ccaaggcgat	caagtctggc	gatgcccgca	tcgtgaagat	ggtgccgcag	1020
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<210> 519
 <211> 1071
 <212> DNA
 <213> Leishmania enriettii ATCC 50120

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<400> 519
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<210> 520
<211> 1071
<212> DNA
<213> Leishmania gerbilli ATCC 50121

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<210> 521
<211> 1114
<212> DNA
<213> Leishmania hertigi ATCC 50125

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<210> 522
 <211> 1106
 <212> DNA
 <213> Leishmania major ATCC 50122

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	gcgtacctga	agcgcgtggg	ctacaacccg	gagaagggtgc	gcttcatccc	gatctcgggc	420
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	attgcgtgcc	gcttcgcgga	aatcgagtcc	aagatcgacc	gccgctccgg	caaggagctg	960
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<210> 523
 <211> 1105
 <212> DNA
 <213> Leishmania amazonensis ATCC 50131

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	gagaagaacc	ccaaggcgat	caagtctggc	gacgcgcgca	tcgtgaagat	ggtgccgcag	1020
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<210> 524
 <211> 1098
 <212> DNA
 <213> Leishmania mexicana ATCC 50156

<400> 524

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gagaagaacc ccaaggcgat caagtctggc gacgcgcgga tcgtgaagat ggtgccgcag 1020
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<210> 525

<211> 1081

<212> DNA

<213> Leishmania tarentolae strain II WT

<400> 525

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gttcaacgac tacgcgcgcg ttggccgctt tgctgtgcgc gacatgcgcc aaaccgttgc 1080
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<210> 526

<211> 1102

<212> DNA

<213> Leishmania tropica ATCC 50129

<400> 526

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gtggagaccg gcatcatgaa gccgggcgac gtggtgacgt tcgcgcccgc caacgtgacg 660
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cgcgacatgc gccaaaccgt tg 1102
```

```
<210> 527
<211> 1105
<212> DNA
<213> Neospora caninum strain Suarez-4
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<223> n represents any nucleotide
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<220>
<221> misc_feature
<222> (353)..(353)
<223> n represents any nucleotide
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<222> (386)..(386)
<223> n represents any nucleotide
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<221> misc_feature
<222> (402)..(402)
<223> n represents any nucleotide
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<221> misc_feature
<222> (430)..(430)
<223> n represents any nucleotide
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aaacatgatt acaggcacat cccaggctga ctgtgctgtc ctgattgttg ctgctggtgt 180
tgggtgaattt gaagccggta tctccaagaa cgggcagacc cgtgagcatg cccttntggc 240
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<210> 528
<211> 935
<212> DNA
<213> Trichomonas vaginalis ATCC 30001
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<210> 529

<211> 1065

<212> DNA

<213> Trypanosoma brucei subsp. brucei strain EATRO795

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<210> 530

<211> 1297

<212> DNA

<213> Crithidia fasciculata ATCC 11745

<400> 530
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<210> 531
 <211> 1298
 <212> DNA
 <213> *Leishmania tropica* ATCC 30816

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<210> 532
 <211> 1297
 <212> DNA
 <213> *Leishmania aethiopica* ATCC 50119

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ggcctgctga tgggggtcgta cgaccagatc cccggaga

1297

<210> 533

<211> 1298

<212> DNA

<213> Leishmania donovani ATCC 50212

<400> 533

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<210> 534

<211> 1298

<212> DNA

<213> Leishmania infantum strain MOU

<400> 534

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<210> 535

<211> 1301

<212> DNA

<213> Leishmania gerbilli ATCC 50121

<400> 535

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<210> 536

<211> 1298

<212> DNA

<213> Leishmania hertigi ATCC 50125

<400> 536

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<210> 537

<211> 1297

<212> DNA

<213> Leishmania major ATCC 50122

<400> 537

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tgcatgacg acgacggacc tgctgaagct gaagtcgaag gttgtgtcga ccggcgcaa 180
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<210> 538

<211> 1297

<212> DNA

<213> *Leishmania amazonensis* ATCC 50131

<400> 538

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<210> 539

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<221> misc_feature

<222> (3)..(3)

<223> n represents a modified base

<220>

<221> misc_feature

<222> (18)..(18)

<223> n represents a modified base

<220>
<221> misc_feature
<222> (21)..(21)
<223> n represents a modified base

<220>
<221> modified_base
<222> (3)..(3)
<223> i

<220>
<221> modified_base
<222> (18)..(18)
<223> i

<220>
<221> modified_base
<222> (21)..(21)
<223> i

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

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27

<210> 540
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (6)..(6)
<223> n represents a modified base

<220>
<221> misc_feature
<222> (18)..(18)
<223> n represents a modified base

<220>
<221> modified_base
<222> (6)..(6)
<223> i

<220>
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<223> i

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 540
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23

<210> 541
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 541
gtkgaaatgt tccgcaagct gct 23

<210> 542
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 542
cggaartaga actgsggacg gtag 24

<210> 543
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 543
atcttagtag tttctgctgc tga 23

<210> 544
<211> 23
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Oligonucleotide

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26

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23

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21

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<210> 551
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<210> 557
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23

<210> 560
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23

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26

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29

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26

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23

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23

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23

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23

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20

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20

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23

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25

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26

<210> 577
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20

<210> 578
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Oligonucleotide

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20

<210> 579

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20

<210> 580

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Oligonucleotide

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gctaaaccag ctacaatcac tccac

25

<210> 581

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22

<210> 582

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28

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cagaagtata cgtattatca 20

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<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 588
tcttctcaaa ctatcgtcca 20

<210> 589
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 589
gcacgaaact tctaaaacaa 20

<210> 590
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 590
tatacgtatt atctaaagat 20

<210> 591
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 591
tcctggttct attacaccac 20

<210> 592
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 592
caaagctgaa gtatacgtat 20

<210> 593
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:

Oligonucleotide

<400> 593 20
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<210> 594
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 594 20
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<210> 595
<211> 20
<212> DNA
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 595 20
ttaaagcaga cgtatacggt

<210> 596
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 596 20
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<210> 597
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 597 20
attggtatca aagaaacttc

<210> 598
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 598
aattacacct cacacaaaat 20

<210> 599
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 599 20
cggatgaagaa atcgaaatca

<210> 600
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 600 20
atgcaagaag aatcaagcaa

<210> 601
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 601 20
gtttcacgtg atgatgtaca

<210> 602
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 602 20
aagttgaagt tgttggtatt

<210> 603
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 603

ggtattaaag acgaaacatc

20

<210> 604
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
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<400> 604
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20

<210> 605
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
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<400> 605
gaaatgttcc gtaaattatt

20

<210> 606
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 606
attagactac gctgaagctg

20

<210> 607
<211> 821
<212> DNA
<213> Enterococcus faecalis ATCC 29212

<400> 607
cggagctatc ttagtagttt ctgctgctga tggctctatg cctcaaacac gtgaacatat 60
cttattatca cgtaacgttg gtgtaccata catcgttgta ttcttaaaca aaatggatat 120
ggttgatgac gaagaattat tagaattagt agaaatggaa gttcgtgact tattatcaga 180
atacgatttc ccaggcgatg atgttccagt tatcgcaggt tctgctttga aagctttaga 240
aggcgacgag tcttatgaag aaaaaatctt agaattaatg gctgcagttg acgaatatat 300
cccaactcca gaacgtgata ctgacaaacc attcatgatg ccagtcgaag acgtattctc 360
aatcactgga cgtggtactg ttgctacagg acgtgttgaa cgtgggtgaag ttcgcgttgg 420
tgacgaagtt gaaatcgttg gtattaaaga cgaacatctt aaaacaactg ttacaggtgt 480
tgaaatgttc cgtaaattat tagactacgc tgaagcaggc gacaacttcg gtgctttatt 540
acgtgggtga gcacgtgaag atatcgaacg tggacaagta ttagctaaac cagctacaat 600
cactccacac acaaaattca aagctgaagt atacgtatta tcaaaagaag aaggcggacg 660
tcacactcca ttcttcacta actaccgtcc tcaattctac ttccgtacaa cagacgttac 720
tggtgttgta gaattgccag aagggtactga aatggtaatg cctgggtgata acgttgctat 780
ggacgttgaa ttaattcacc caatcgctat cgaagacgga a 821

<210> 608
<211> 751

<212> DNA

<213> *Enterococcus faecium* ATCC 19434

<400> 608

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cctattgtct cgtcaagttg gtgttcctta catcgttgta ttcttgaaca aagtagacat 120
ggttgatgac gaagaattac tagaattagt tgaaatggaa gttcgtgacc tattaacaga 180
atacraattc cctggtgrcg atgttcctgt agttgctgga tcagctttga aagctctaga 240
aggcgacgct tcatacgaag aaaaaattct tgaattaatg gctgcagttg acgaatacat 300
cccaactcca gaacgtgaca acgacaaacc attcatgatg ccagttgaag acgtgttctc 360
aattactgga cgtgggtactg ttgctacagg tcgtgttgaa cgtggacaag ttcgcttg 420
tgacgaagtt gaagtgtgtg gtattgctga agaaacttca aaaacaacag ttactggtgt 480
tgaaatgttc cgtaaattgt tagacyacgc tgaagctgga gacracattg gtgctttact 540
acgtggtggt gcacgtgaag acatccaacg tggacaagtt ttagctaaac cagggtacaat 600
cacacctcrt acaaaaattct ctgcagaagt atacgtgttg acaaaagaag aagggtggacg 660
tcatactcca ttcttacta actaccgtcc acaattctac ttccgtacaa ctgacgtaac 720
aagggtgtgt gaattaccag aaggaactga a 751
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<210> 609

<211> 751

<212> DNA

<213> *Enterococcus gallinarum* ATCC 49573

<400> 609

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cttgttatca cgtaacgttg gcgwaccata catcgttggt ttcttgaaca aaatggatat 120
ggttgaygac gaagaattgc tagaattagt tgaaatggaa gttcgtgacc tattgtctga 180
atatgacttc ccaggcgacg atgttcctgt aatcgccggt tctgctttga aagctcttga 240
aggagatcct tcatacgaag aaaaaatcat ggaattgatg gctgcagttg acgaatacgt 300
tccaactcca gaacgtgata ctgacaaacc attcatgatg ccagtcgaag acgtattctc 360
aatcactgga cgtgggtactg ttgctacagg ccgtgttgaa cgtggacaag ttcgcttg 420
tgatgaagta gaaatcgttg gtattgctga cgaaactgct aaaacaactg taacagggtgt 480
tgaaatgttc cgtaaattgt tagactatgc tgaagcaggg gataacattg gtgcattgct 540
acgtgggggt gctcgtgaag acatccaacg tggacaagta ttggctaaag ctggtacrat 600
cacacctcat acaaaaattca aagctgaagt ttatgttttg acaaaagaag aagggtggrcg 660
tcacactcca ttcttacta actaccgtcc tcagttctac ttccgtacaa ctgacgtaac 720
tggtgttgtt gaattaccag aaggaactga a 751
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<210> 610

<211> 891

<212> DNA

<213> *Haemophilus influenzae* Rd strain KW20

<400> 610

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ggtcctatgc cacaaactcg tgaacacatc ttattaggtc gccaagtagg tgttccatac 120
atcatcgtat tcttaaacia atgacacatg gtagatgacg aagagttatt agaattagtc 180
gaaatggaag ttctgtgaact tctatctcaa tatgacttcc cagggtgacga tacaccaatc 240
gtacgtgggt cagcattaca agcgttaaac ggcgtagcag aatgggaaga aaaaatcctt 300
gagttagcaa accacttaga tacttacatc ccagaaccag aacgtgcgat tgaccaaccg 360
ttccttcttc caatcgaaga tgtgttctca atctcaggtc gtggtactgt agtaacaggt 420
cgtgtagaac gaggtattat ccgtacaggt gatgaagtag aaatcgtcgg tatcaaagat 480
acagcgaaaa ctactgtaac ggggtgttgaa atgttccgta aattacttga cgaagggtcgt 540
gcagggtgaaa acatcgggtg attattacgt ggtaccaaac gtgaagaaat cgaacgtggt 600
caagtattag cgaaaccagg ttcaatcaca ccacacactg acttcgaatc agaagtgtac 660
gtattatcaa aagatgaagg tggcgtcat actccattct tcaaagggtta cgtgccacaa 720
ttctatttcc gtacaacaga cgtgactggt acaatcgaat taccagaagg cgtggaaatg 780
gtaatgccag gcgataacat caagatgaca gtaagcttaa tccacccaat tgcgatggat 840
caagggtttac gtttcgcaat ccgtgaaggt ggccgtacag taggtgcagg c 891
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<210> 611

<211> 818

<212> DNA

<213> *Staphylococcus epidermidis* ATCC 14990

```

<400> 611
cggcggtatc ttagttgtat ctgctgctga cgggtccaatg ccacaaactc gtgaacacat 60
cttattatca cgtaacggtg gtgtaccagc attagttgta ttcttaaaca aagttgacat 120
ggtagacgac gaagaattat tagaattagt tgaaatggaa gttcgtgact tattaagcga 180
atatgacttc ccaggtgaag atgtacctgt aatcgctggt tctgcattaa aagcattaga 240
aggcgatgct gaatacgaac aaaaaatctt agacttaatg caagcagttg atgattacat 300
tccaactcca gaacgtgatt ctgacaaacc attcatgatg ccagttgagg acgtattctc 360
aatcactggt cgtggtactg ttgctacagg ccgtgttgaa cgtggtcaaa tcaaagttgg 420
tgaagaagtt gaaatcatcg gtatgcacga aacttctaaa acaactgtta ctggtgtaga 480
aatgttccgt aaattattag actacgctga agctggtgac aacatcggtg ctttattacg 540
tggtgttgca cgtgaagacg tacaacgtgg tcaagtatta gctgctcctg gttctattac 600
accacacaca aaattcaaag ctgaagtata cgtattatct aaagatgaag gtggacgtca 660
cactccattc ttcactaact atcgcccaca attctatttc cgtactactg acgtaactgg 720
tggttgaaac ttaccagaag gtacagaaat ggttatgcct ggcgacaacg ttgaaatgac 780
agttgaatta atcgctccaa tcgctatcga agacggaa 818

```

<210> 612

<211> 825

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 9150

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<400> 612
ggcgcgatcc tggtttgttg tgcgactgac ggcccgatgc cgcagaccgc tgagcacatc 60
ctgctgggtc gtcaggtagg cgttccgtac atcatcggtt tcctgaacaa atgcgacatg 120
gttgatgacg aagagctgct ggaactggtt gaaatggaag ttcgtgaact tctgtctcag 180
tacgacttcc cgggagacga cagccgatc gttcgtgggt ctgctctgaa agcgtggaa 240
ggcgacgcag agtgggaagc gaaaatcatc gaactggctg gcttctgga ttcttacatc 300
ccggaaccag agcgtgcat tgacaagccg ttctgctgc cgatcgaaga cgtattctcc 360
atctccggtc gtggtaccgt tgttaccggt cgtgtagaac gcggtatcat caaagtgggc 420
gaagaagttg aaatcggttg tatcaaagag actcagaagt ctacctgtac tggcgttgaa 480
atgttccgca aactgctgga cgaaggccgt gccggtgaga acgtaggtgt tctgctgcgt 540
ggtatcaaac gtgaagaaat cgaacgtggt caggtagctg ctaagccggg caccatcaag 600
ccgcacacca agttcgaatc tgaagtgtac attctgtcca aagatgaagg cggccgtcat 660
actccgttct tcaaaggcta ccgtccgcag ttctacttcc gtactactga cgtgactggc 720
accatcgaac tgccggaagg cgtagagatg gtaatgccgg gcgacaacat caaatgggtt 780
gttaccctga tccaccgat cgcaatggac gacggtctgc gtttc 825

```

<210> 613

<211> 778

<212> DNA

<213> *Serratia ficaria* ATCC 33105

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<400> 613
ggcgctatcc tggtttgttg tgcgactgac ggcccgaatgc ctcagaccgc tgagcacatc 60
ctgctgggtc gycagggttg cgttcccttc atcatcgtrt tcatgaacaa atgcgacatg 120
gttgatgatg aagagctgct ggaactggtt gaaatggaag ttcgcgaact gctgtccgct 180
tacgacttcc ctggcgatga cctgccggtg attcgcggtt ccgcgctgaa agcgtggaa 240
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gaagaagttg aaatcggttg tatcaaagac accgtcaagt ctacctgtac cggcgttgaa 480
atgttccgca aactgctgga cgaaggccgt gccggtgaga acgtaggtgt tctgctgcgt 540
ggtatcaagc gtgaagacat cgaacgtggt caggttcttg ctaaaccagg ttccatcaag 600
ccgcacaccc agttcgattc agaagtgtac atcctgagca aagaagaagg tggtcgtcac 660
ackccattct tcaaaggcta ccgtccacag ttctacttcc gtactactga cgtgaccggt 720
accatcgaac tgccagaagg cgttgagatg gtaatgcctg gcgacaacgt gaacatga 778

```

<210> 614

<211> 653

<212> DNA

<213> *Enterococcus malodoratus* ATCC 43197

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<400> 614
gtgcatcctt agtagtatca gctactgatg gtccaatgcc tcaaactcgt gaacacattt 60
tggtatcacg tcaagttggg gttaagcact tgatcgtttt cttgaacaaa gtagatttag 120
ttgatgacga agaattgatc gacttagttg aaatggaagt acgtgaatta ctttctgaat 180
atggtttccc aggtgatgat attccagtcg ttaaagggtc tgctttgaaa gcattagaag 240
gcatccaga acaagaacaa gttattcttg atttgatgga taccgttgat gaatatatcc 300
caacacctga acgtgacaat gacaaaccgt tcttgttacc agttgaggat gttttctcga 360
tcacaggacg tgggtactgta gcttctgggc gtatcgaccg tggcgaagtt aaagtcggcg 420
atgaaattga aatcatcggt atcaaacctg aagttcaaaa agcaatcggt actggacttg 480
aaatgttccg taaaacattg gattatgggt aagctggcga taacgttggg gttctattac 540
gtgggattac acgtgatgaa atcgaacgtg gccaaagtatt agctaaacca ggttcaatca 600
caccacatac taagttcaaa gccgaagtat atgtgttgac gaaagaagaa ggt 653
```

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<210> 615
<211> 829
<212> DNA
<213> Enterococcus durans ATCC 19432
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<400> 615
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tgtcacgtca agtaggtggt aaatatttga tcgtcttctt gaacaaaatc gacttagtag 120
atgatgaaga attgattgat cttgtcgaaa tggaagttcg tgaattatta agcgaatatg 180
gtttcccgagg tgacgataca ccagtcatca aaggttcagc attaaaagct ttacaaggag 240
atcctgatgc agaagcagct atcatggaat tgatggatac tgttgatgaa tatatcccaa 300
caccagaacg tgatacagac aaaccattat tgttaccagt ggaagatgtc ttctcaatca 360
caggtcgtgg gactgttgct tcaggtcgta tcgatcgtgg tgcagttcgt gtaggtgatg 420
aaatcgaaat cgtcgggtatc aaacctgaaa cacaaaaagc tggtgtaact ggggtcgaaa 480
tgttccgcaa gacattagac tatggtgaag caggagataa cgttggggta ttgttacgtg 540
gtatccaacg tgaagatata gaacgtggac aagtaatcgc aaaaccaggt tcaatcacac 600
cacatacaaa attcaaagca gaagtgtacg tattgacaaa agaagaaggt ggacgtcata 660
caccattctt caataactat cgtccacaat tctacttccg tacaactgac gtaactggaa 720
caatcgtttt acctggaggc actgaaatgg ttatgcctgg agataacgta acgatcgacg 780
ttgaattgat ccatccagtt gccatcgaaa acggaacaac tttctctat 829
```

```
<210> 616
<211> 669
<212> DNA
<213> Enterococcus pseudoavium ATCC 49372
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<400> 616
ggtgcaattt tagtagtatc tgctactgat ggcccaatgc cacaacacg tgaacatatc 60
ttgttatcac gtcaagtagg ggttaaacac ttaatcgtct tcttgaacaa agttgattta 120
gttgatgatg aagaattgat cgatttagtt gaaatggaag ttcgggaatt gctttctgaa 180
tatggtttcc cagcgatga tattccagta cttaaagggt ctgctttgaa agcttttagaa 240
ggcgatcctg aacaagaaca agtaatcctt gacttgatgg atacggttga tgaatacatc 300
ccaacgcctg aacgtgatac tgacaaacca ttcttgttac cagtcgaaga tgtcttctca 360
atcacaggac gtggtacggg tgcactctgg gatcaaacct gaagtgcata aagctgtcgt aactggacta 480
gatgaagttg aaatcatcgg gatcaaacct gaagtgcata aagctgtcgt aactggacta 480
gaaatgttcc gtaagacatt ggattacggg gaagctggcg ataactgttg ggttctatta 540
cgtgggatta ctctgatgaa aatcgaacgt ggacaagtat tagctaaacc aggttcaatc 600
actccacata cgaaattcag tgcagaagtt tatgtattga cgaaagaaga aggtggccgt 660
catacgcca 669
```

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<210> 617
<211> 835
<212> DNA
<213> Enterococcus dispar ATCC 51266
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<400> 617
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ttgttagctt cgtcaagtag ggggttaata tttaatcgtc ttcttgaaca aaacagattt 120
agttgatgat gaagaattat tggaactagt tgaaatggaa gttcgtgaat tattaatatga 180
atacaatttc cctggcgatg atattcctgt tattcgcgga tctgctttaa aagcattaga 240
```


aggcgatcca	gaacaagaag	aagtaattat	gaacttgatg	gatactgtgg	atgaatatat	300
cccaactcca	gaacgtgaca	atgataaacc	attcttggtta	ccagtgggaag	atgtcttcac	360
aattactggg	cgtgggtactg	ttgcttcagg	tcgtatcgac	cgtgggtaaag	tcaacgttgg	420
tgatgaaatt	gaaattatcg	gaattaaacc	agaaacacaa	aaagctgttg	taaccggttt	480
ggaaatgttc	cgtaaaactt	tggattatgg	tgaagctggt	gataacgttg	gggtcttatt	540
acgtgggatt	actcgtgatg	aagtagaacg	tggtcaagta	ttagcaaaac	caggttccat	600
tacaccgcat	accaaattta	aaggtgaagt	ttatatctta	acaaaagaag	aaggtgggacg	660
tcatactcct	ttctttaata	actatcgtcc	tcaattttat	ttccgtacaa	ctgatgtgac	720
tggtaacatc	gcattacctg	aaggaactga	aatggtaatg	cctggtgata	atgtaacaat	780
tgaagttgaa	ttgattcatc	caatcgccgt	tgaaaaaggg	actactttct	caatt	835

<210> 618

<211> 673

<212> DNA

<213> *Enterococcus avium* ATCC 14025

<400> 618

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ttgctatcac	ggcaagtggg	tgtaaacaac	ttaatcgtat	ttttaaacia	agttgattta	120
gtcgtatgat	aagaattgat	cgatctagtt	gaaattggaag	tccgtgaatt	actttctgaa	180
tatggtttcc	caggtgacga	tattccagtt	ctcaaagggt	cagctttgaa	agcattagaa	240
ggcgtacctg	aacaagaaca	agtaatcctt	gatttaaatgg	atacagttga	cgaatatatc	300
ccaactccag	aacgtgacac	tgacaagcca	ttcttggttac	cagtcgaaga	tgtattttct	360
atcactgggt	gtgggactgt	agcgtctgga	cggattgatc	gtgggtgaagt	taaagtcggc	420
gatgaagttg	aaatcatcgg	gatcaaacct	gaaattcaaa	aagcagtcgt	aactggactt	480
gaaatgttcc	gtaaaacttt	agattatggg	gaagctggcg	ataacgttgg	ggttctatta	540
cgtgggatta	cacgtgatga	aatcgaacgt	ggtcaagtct	tagctaaacc	aggttcaatc	600
acaccacata	caaaattcag	tgcagaagtt	tacgtattga	cgaaagaaga	aggtgggacgt	660
catacaccat	ctt					673

<210> 619

<211> 1713

<212> DNA

<213> *Saccharomyces cerevisiae*

<400> 619

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gcgaccaggc	tttctctcct	tttgctgcta	actgggttaca	gatttttcta	tttttgggtca	120
tttttatctt	tgaaactgat	taagctgaaa	aaatttgagc	ttctttgttg	ttaactatttt	180
tgtgctttca	gttttattct	agctcgacaa	aggtaacaga	caaaaatgtc	agctttatta	240
ccaagattac	tcacaagaac	agctttttaa	gcttctggga	aacttctgag	gctctcttca	300
gtaattttca	ggaccttttc	tcaaactact	acttctctatg	cagctgcttt	tgatcggtcc	360
aaaccgcatg	taaatatagg	tacgatcggc	catggttgatc	atgggaagac	aactttaacc	420
gcagccatta	cgaaaacgtt	agccgcaaaa	ggtgggtgcca	acttcttgga	ctatgctgcc	480
atcgataagg	ctccggaaga	aagagctcgt	ggtattacaa	tttctactgc	acacgtggaa	540
tacgaaacgg	ccaagagaca	ttattctcac	gtcgactgtc	caggccacgc	tgattacatc	600
aagaatatga	ttaccgggtg	tgctcaaattg	gatgggtgcta	tcattgttgt	agctgctacc	660
gatggacaaa	tgccccaac	tagagaacat	ttacttttgg	ccagacaagt	tggtgtccaa	720
catattgtcg	tttttggtta	caaggttgat	accattgatg	atccagaaat	gttagagtta	780
gtcgaaatgg	aaatgagaga	acttttaaac	gaatatgggt	ttgacgggtga	taatgctcca	840
attatcatgg	gttctgcctt	ttgcgctttg	gaaggtcgcc	aacctgaaat	tggggagacag	900
gccatcatga	aacttttgga	tgcaagtggat	gagtatattc	ctacacctga	aagagatttg	960
aacaagcctt	cttctgatgcc	cgttgaagat	atcttctcta	tctccggtag	aggtactgtg	1020
gtcactgggt	gtgtggaaag	gggtaattta	aagaaagggtg	aggaattgga	aattgtttggt	1080
cacaactcca	ccccattgaa	aacaacagtt	actgggtattg	aaatgttttag	aaaggaattg	1140
gactctgcta	tggcaggtga	caatgcgggt	gttttactta	gaggtatcag	gagagatcaa	1200
ttgaagagag	gtatggtctt	agctaagcca	ggtaccgtta	aagcccatac	aaagtctgta	1260
gcctctttgt	acattttatc	caaagaggaa	gggtggtagac	attctgggtt	tgggtgaaaac	1320
tacagaccac	aaatgtttat	aagaacagct	gatgttacag	ttgtgatgag	atttctctaag	1380
gaggttgaag	atcattctat	gcaagttatg	ccaggtgaca	atgttgaaat	ggaatgtgat	1440
ttgatccatc	ctaccccatc	agaagttggg	caacgtttca	atatcagaga	gggtggaaga	1500
actgtttgga	ccggtctaatt	cacacgtatt	attgaaataga	cttattgatg	caactggag	1560
atattttctat	atattctgtt	catttccctt	ctcataatat	atacttgttt	cgttaaaatt	1620
ttatacgtgt	aaataaagtg	ccataaattt	ttcagcttta	cttttggttag	agtcctgcta	1680

gcactagatt ttacaatttc atgtgcacac acc 1713

<210> 620
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 620
attggtgcat tgctacgt 18

<210> 621
<211> 751
<212> DNA
<213> Enterococcus faecium ATCC 19434

<400> 621
tgggtgcaatc ttagttgttt ctgcaactga cgggtccgatg cctcaaacac gtgaacacat 60
tttattgtca cgccaagtgt gtgtaaaata cctgattgtt ttcttgaaca aagttgattt 120
agtcgatgat gaagaattga tcgatttgggt agaaatggaa gttcgcgagt tattgagcga 180
atatggtttc ccaggcgatg acactcctgt gatcaaaggt tccgcattaa aagcattgca 240
aggcgatcca gatgctgaag ctgctattat ggaattgatg gatacagtag atgaatatat 300
cccaacacca gaacgtgata cagataaacc attactattg ccagtggaaag acgtcttctc 360
aattacagggt cgaggaaactg ttgcctcagg tcgtattgat cgtggtgctg ttcgtgtcgg 420
tgatgaggta gagatcgtag ggatcaaacc tgaaacacaa aaagcagttg taacagggtgt 480
agaaatgttc cgtaaaacgt tagattacgg ggaagctggg gataacgtag gcgtgttggt 540
acgggggatc caacgtgacg atatcgaacg tggacaagta cttgctaaac caggttccat 600
tactccacat acaaaaattca aagcagaagt gtacgtgttg acaaaaagaag aaggtggacg 660
tcatactcca ttcttcaaca actatcgtcc acagttctac ttccgcacaa ctgatgttac 720
aggaacaatc acattgccag aagatacaga a 751

<210> 622
<211> 750
<212> DNA
<213> Saccharomyces cerevisiae ATCC 13264

<400> 622
gtcaaatggg acgaatccag attccaagaa attgtcaagg aaacctccaa ctttatcaag 60
aaggttgggt acaacccaaa gactgttcca ttctgtccaa tctctgggtg gaacgggtgac 120
aacatgattg aagctaccac caacgctcca tggtagaagg gttgggaaaa ggaaaccaag 180
gccggtgtcg tcaagggtaa gactttgttg gaagccattg acgccattga acaaccatct 240
agaccaactg acaagccatt gagattgcca ttgcaagatg ttacaagat tgggtggtatt 300
ggtactgtgc cagtcggtag agttgaaacc ggtgtcatca agccaggtat ggttggttact 360
ttcgccccag ctggtgttac cactgaagtc aagtcggttg aaatgcatca cgaacaattg 420
gaacaagggtg ttccagggtga caacgttgggt ttcaacgtca agaacgtttc cgttaaggaa 480
atcagaagag gtaacgtctg tggtagacgt aagaacgatc caccaaaggg ttgcgcttct 540
ttcaacgcta ccgtcattgt tttgaacctt ccagggtcaaa tctctgctgg ttactctcca 600
gttttggatt gtcacactgc tcacattgct tgtagattcg acgaattgtt ggaaaagaac 660
gacagaagat ctggtaagaa gttggaagac catccaaagt tcttgaagtc cgggtgacgct 720
gctttggtca agttcgttcc atctaagcca 750

<210> 623
<211> 1269
<212> DNA
<213> Cryptococcus neoformans ATCC 44104

<400> 623
tcttgaaagc ttaaggccga gcgagagcga ggtatcacca tcgacattgc tctttggaag 60
ttcgagaccc ccagggtacca ggtcaccgtc attgacgccc ccggtcaccg agacttcatc 120

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aagaacatga tcaccggtac ctcccaggct gactgtgcc tctcatcat tgccaccggt 180
atcgggtgagt tcgaggccgg tatctccaag gacggtcaga cccgagagca cgccctcctc 240
gccttcaccc tcgggtgtcag gcagctcatt gttgcttgca acaagatgga cacctgcaag 300
tggtccgagg accgattcaa cgaaatcgct aaggagacca acggtttcat caagaagggt 360
ggttacaacc ccaaggctgt ccccttcgtc cccatctctg gttggcacgg tgacaacatg 420
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gggtaagacc ctccctcgagg ccacgcagc catcgagccc cctaccgcac ccaccgacaa 600
gcccctccgt ctccctctcc aggacgtcta caagatcggt ggtatcggca cagtccctgt 660
cggccgagtc gagaccggtg tcatcaaggc cggtatgttg tctcatctct cttgtctcgt 720
aacatgcgtc tcgtaacatg cgcttacttc attttcagggt atggctcgtc agttcgcccc 780
caccaacgtc accactgaag tcaagtcctg tgagatgcac cagagcaga tccccgaggg 840
tcttcccgga gacaacgttg gtttcaacgt caagaacgtt tccatcaagg acatccgacg 900
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ccaggttatc gtccttaacc accctggtca gatcggtgcc gggtacaccc ccgttctcga 1020
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ggtcattggag gccgccccca agttcgtcaa gtctggtgac gccgccattg tcaagcttgt 1200
tgcccagaag cccctctgtg ttgagaccta cgccgactac cccctcttg gtcgattcgc 1260
cgtccgaga                                     1269

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<210> 624
 <211> 753
 <212> DNA
 <213> *Candida albicans* ATCC 36801

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<400> 624
tctgtcaaat gggacaaaaa cagatttgaa gaaatcatca aggaaacctc caacttcgtc 60
aagaagggtg gttacaaccc aaagactggt ccattcggtc caatctctgg ttggaatggt 120
gacaacatga ttgaaccatc caccaactgt ccattggtaca agggttggga aaaggaaacc 180
aaatccggta aagttaactg taagaccttg ttagaagcta ttgacgctat tgaaccacca 240
accagaccaa ccgacaaacc attgagattg ccattgcaag atgtttacaa gatcgggtgg 300
attggtactg tgccagtcgg tagagttgaa actggtatca tcaaagccgg tatggttgtt 360
actttcgccc cagctggtgt taccactgaa gtcaaatccg ttgaaatgca tcacgaacaa 420
ttggtgaaag gtgttcagg tgacaatggt gggttcaacg ttaagaacgt ttccgttaaa 480
gaaattagaa gagtaacgt ttgtggtgac tccaagaacg atccaccaa gggttgtgac 540
tctttcaatg cccaagtcac tgttttgaa catccaggtc aaatctctgc tggttactct 600
ccagtcttgg attgtcacc tgcccacatt gcttgtaaat tcgacacttt ggttgaaaag 660
attgacagaa gaactggtaa gaaattggaa gaaaatccaa aattcgtcaa atccggtgat 720
gctgctatcg tcaagatggt cccaaccaa cca                                     753

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<210> 625
 <211> 26
 <212> DNA
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<220>
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<400> 625
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26

<210> 626
 <211> 26
 <212> DNA
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<220>
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<400> 626

taccaccttt taagtaaggt gctaat

26

<210> 627

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 627

attgtctata aaaatggcga taagtc

26

<210> 628

<211> 26

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:
Oligonucleotide

<400> 628

aaaatggcga taagtcacaa aaagta

26

<210> 629

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 629

aagttccatc tcaacaaggt caata

25

<210> 630

<211> 22

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:
Oligonucleotide

<400> 630

cggagctatc ctagtcgttt ca

22

<210> 631

<211> 26

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<223> i

<220>
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26

<210> 632
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<220>
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23

<210> 633
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<222> (19)..(19)
<223> i

<220>
<223> Description of Artificial Sequence:
      Oligonucleotide

<400> 633
cagaccaacy ganaarcnt tragat
26

<210> 634
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<220>
<221> misc_feature
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<223> n represents a modified base

<220>

<221> modified_base

<222> (15)..(15)

<223> i

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 634

aacacygtca grrcnattgc yatgga

26

<210> 635

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

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<222> (9)..(9)

<223> n represents a modified base

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<222> (21)..(21)

<223> n represents a modified base

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<222> (9)..(9)

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<222> (21)..(21)

<223> i

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<223> Description of Artificial Sequence:
Oligonucleotide

<400> 635

aaaccrgtna rrgcractct ngctct

26

<210> 636

<211> 23

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<213> Artificial Sequence

<220>

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Oligonucleotide

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<223> n represents a modified base

<220>

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<222> (12)..(12)

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<400> 636
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23

<210> 637
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23

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26

<210> 639
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28

<210> 640

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<223> n represents a modified base

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<222> (9)..(9)

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<222> (15)..(15)

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<400> 640

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23

<210> 641

<211> 26

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<213> Artificial Sequence

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<222> (12)..(12)

<223> n represents a modified base

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<222> (15)..(15)

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<222> (18)..(18)

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<222> (12)..(12)
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<222> (15)..(15)
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<220>
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<400> 641
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26

<210> 642
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Oligonucleotide

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<223> n represents a modified base

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<222> (15)..(15)
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<400> 642
ggcgtnggng arcgnacncg tga

23

<210> 643
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<220>
<223> Description of Artificial Sequence:Description of
Artificial Sequence Oligonucleotide

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<220>
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23

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Oligonucleotide

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<400> 644
acgtcngtng tnckgaarta gaa

23

<210> 645
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Oligonucleotide

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<400> 645
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23

<210> 646
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Oligonucleotide

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<222> (12)..(12)
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<400> 646
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23

<210> 647
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
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Oligonucleotide

<400> 647
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26

<210> 648
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 648
acgtcsgtsg trcggaagta gaactg

26

<210> 649
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Oligonucleotide

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<223> n represents a modified base

<220>
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<222> (20)..(20)
<223> i

<400> 649
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26

<210> 650
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<220>
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Oligonucleotide

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<223> n represents a modified base

<220>
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<400> 650
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23

<210> 651
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Oligonucleotide

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<220>
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Oligonucleotide

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<400> 652
ccwayagtny knccnccytc yctnata

27

<210> 653
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<213> Artificial Sequence

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Oligonucleotide

<220>
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<222> (9)..(9)
<223> n represents a modified base

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<222> (9)..(9)
<223> i

<400> 653
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20

<210> 654
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Oligonucleotide

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<222> (12)..(12)
<223> n represents a modified base

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<400> 654
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20

<210> 655
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<213> Artificial Sequence

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Oligonucleotide

<220>
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<222> (9)..(9)
<223> n represents a modified base

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<400> 655
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20

<210> 656
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 656
aattaatggc tgcagttgay ga

22

<210> 657
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 657
ttgtccacgt tcgatrctt ca

22

<210> 658
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 658
gatytatctg atgatgaaga att

23

<210> 659
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Oligonucleotide

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<223> n represents a modified base

<220>
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<400> 659
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23

<210> 660
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 660
gtagaattga ggacggtagt tag

23

<210> 661
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
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Oligonucleotide

<400> 661
gtagaaytgt ggwcgatart trt

23

<210> 662
<211> 832
<212> DNA
<213> Corynebacterium diphtheriae ATCC 27010


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<400> 662
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ggttgatgat gaggaaatca tcgagctcgt cgagatggag atccrtgagc tgctcgctga 180
gcaggattac gacgaagagg ctccaatcat ccacatctcc gactgaagg ctcttgaggg 240
cgacgagaag tggacccagt ccatcatcga cctcatgcag gcttgckatg attccatccc 300
agacccagag cgtgagaccg acaagccatt cctcatgcct atcgaggaca tcttcacccat 360
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gatgttccgt aagcttctcg actacaccga ggctggcgac aactgtggtc tgcttctccg 540
tggcgtaaag cgcgaagacg ttgagcgtgg ccagggttgt gttaagccag gcgcttacac 600
ccctcacacc gagttcgagg gctctgtcta cgttctgtcc aaggacgagg gtggccgcca 660
caccaccatt ttcgacaact accgcccaca gttctacttc cgcaccaccg acgttaccgg 720
tggtgtgaag cttcctgagg gcaccgagat ggtcatgcct ggcgacaacg tcgacatgtc 780
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<210> 663
<211> 1192
<212> DNA
<213> Candida catenulata ATCC 10565

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<400> 663
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cagatgaacg agcccccggg ggctcgtgcc cgtgtcgcct tgaccggttt gaccattgcc 600
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taccagccca ctttggccac cgacatgggt ttgttgagg agagaattac caccaccaag 780
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gagttgggta tctaccccg cgtcgacccc ttggactcca agtcgagatt gttggacgtc 960
gaggttggtg gccaggagca ctacgacgtc gccaccgggt tccaggagtg cttgcaggcc 1020
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aagttgaccg tcgagagagc ccgtaagatc cagcgtttct tgtcgcagcc cttcgctgtc 1140
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<210> 664
<211> 29
<212> DNA
<213> Artificial Sequence

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<220>
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Oligonucleotide

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<222> (9)..(9)
<223> n represents a modified base

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<220>
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<222> (12)..(12)
<223> n represents a modified base

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<220>
<221> misc_feature

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<222> (15)..(15)
<223> n represents a modified base

<220>
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<223> n represents a modified base

<220>
<221> misc_feature
<222> (21)..(21)
<223> n represents a modified base

<220>
<221> modified_base
<222> (9)..(9)
<223> i

<220>
<221> modified_base
<222> (12)..(12)
<223> i

<220>
<221> modified_base
<222> (15)..(15)
<223> i

<220>
<221> modified_base
<222> (18)..(18)
<223> i

<220>
<221> modified_base
<222> (21)..(21)
<223> i

<400> 664
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29

<210> 665
<211> 1377
<212> DNA
<213> *Saccharomyces cerevisiae*

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aagttcgaaa aggaagccgc tgaattaggt aagggttctt tcaagtacgc ttgggttttg 180
gacaagttaa aggctgaaag agaaagaggt atcactatcg atattgcttt gtggaagttc 240
gaaactccaa agtaccaagt taccgttatt gatgctccag gtcacagaga tttcatcaag 300
aacatgatta ctggtacttc tcaagctgac tgtgctatct tgattattgc tgggtgggtgc 360
gggtgaattcg aagccggtat ctctaaggat ggtcaaacca gagaacacgc tttgttgggt 420
ttcaccttgg gtggttagaca attgattggt gctgtcaaca agatggactc cgtcaaattg 480
gacgaatcca gattccaaga aattgtcaag gaaacctcca actttatcaa gaagggtggt 540
tacaacccaa agactgttcc attcgtccca atctctggtt ggaacggtga caacatgatt 600
gaagctacca ccaacgctcc atggtacaag ggttgggaaa aggaaaccaa ggccggtgtc 660
gtcaagggtg agactttggt ggaagccatt gacgccattg aacaaccatc tagaccaact 720
gacaagccat tgagattgcc attgcaagat gtttacaaga ttggtggtat tggtagcttg 780
ccagtcggta gagttgaaac cgggtgtcatc aagccaggta tgggttggtac ttttgcccca 840
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gttccaggtg acaacggttg tttcaacgct aagaacggtt ccgttaagga aatcagaaga 960
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accgtcattg ttttgaacca tccaggtcaa atctctgctg gttactctcc agttttggat 1080

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aagttcgttc	catctaagcc	aatgtgtgtt	gaagctttca	gtgaataccc	accattaggt	1260
agattcgctg	tcagagacat	gagacaaact	gtcgtgtcgc	gtgttatcaa	gtctgttgac	1320
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<210> 666
 <211> 1536
 <212> DNA
 <213> *Saccharomyces cerevisiae*

<400> 666						
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ccaatcaccc	gtaaagttac	cgctgtcatt	ggtgccattg	ttgacgttca	ttttgaacaa	180
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ttggaagtgg	ctcaacattt	gggtgaaaac	actgtcagaa	ccattgctat	ggatgggtacc	300
gaaggtttgg	tccgtggtga	aaaggttctt	gacactgggtg	gccctatctc	cgtcccagtt	360
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ccaattaagt	ccaaactaag	aaagccaatt	cacgcagacc	ctcctagttt	tgcaagaacaa	480
tctacttcgg	ctgaaatttt	ggaaacaggt	atcaaagtcg	tcgatctatt	agctccttat	540
gccagagggtg	gtaagattgg	tcttttcggg	ggtgcagggtg	tcggttaagac	tgtgttcatt	600
caagaattga	ttaacaatat	cgccaaggcc	catggtgggt	tttccgtttt	cgccgggtgtt	660
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gccagagcca	gagtcgcttt	aactgggttg	acgatcgctg	aatatctcag	agatgaagaa	840
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<210> 667
 <211> 1293
 <212> DNA
 <213> *Trypanosoma cruzi* strain Y

<400> 667						
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 tgttgatggg cacatatgat caggtgccgg aga 1293

<210> 668
 <211> 1191
 <212> DNA
 <213> *Corynebacterium glutamicum*

<400> 668
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 <211> 1383
 <212> DNA
 <213> *Escherichia coli*

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<210> 670

<211> 1410
<212> DNA
<213> *Helicobacter pylori* NCTC 11638

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gaaaaagcta aaaacatgaa aaattcctaa 1410

<210> 671
<211> 1401
<212> DNA
<213> *Clostridium acetobutylicum* DSM 792

<400> 671
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aaactcattg ctgaagttag acaacatgta ggagatgaca tagtaagaac aatagcaatg 180
gaaggtactg acggattaaa aagaggaaatg gaagcagtta acactggtaa accaatatct 240
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aaaaaatgta tggaaagcta a 1401

<210> 672
<211> 1509
<212> DNA

<213> *Cytophaga lytica* DSM 2039

<400> 672

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<210> 673

<211> 819

<212> DNA

<213> *Ehrlichia risticii* strain HRC-IL

<400> 673

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<210> 674

<211> 840

<212> DNA

<213> *Vibrio cholerae* ATCC 25870

<400> 674

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 <212> DNA
 <213> *Vibrio cholerae* ATCC 25870

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 <211> 1298
 <212> DNA
 <213> *Leishmania enriettii* ATCC 50120

<400> 676						
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 <213> *Babesia microtti* strain Persing-1

<400> 677

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<211> 551

<212> DNA

<213> *Cryptococcus neoformans* strain Lev-12

<400> 678

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<210> 679

<211> 552

<212> DNA

<213> *Cryptococcus neoformans* ATCC 44104

<400> 679

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<211> 1018

<212> DNA

<213> *Cunninghamella bertholletiae* ATCC 42115

<400> 680

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<210> 681

<211> 23

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<223> n represents a modified base

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<223> i

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<210> 682
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<210> 683
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26

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<210> 691

<211> 1860

<212> DNA

<213> Schizosaccharomyces pombe strain 972 h-

<400> 691

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<210> 692

<211> 1833

<212> DNA

<213> Trypanosoma congolense strain IL3000

<400> 692

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<210> 693

<211> 1758

<212> DNA

<213> Thermus thermophilus strain HB8

<400> 693

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Oligonucleotide

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<210> 695
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 695
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<210> 696
<211> 26
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Oligonucleotide

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<223> n represents a modified base

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<222> (12)..(12)

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<222> (21)..(21)

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<400> 696

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<210> 697

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Oligonucleotide

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<223> n represents a modified base

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<220>
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23

<210> 698
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Oligonucleotide

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<400> 700
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<210> 701
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<213> Artificial Sequence

<220>
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Oligonucleotide

<400> 701
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<210> 702
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Oligonucleotide

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<210> 704
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<212> DNA
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 704
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<210> 705
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Oligonucleotide

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<210> 706

<211> 20
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Oligonucleotide

<400> 706
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<210> 707
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<220>
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Oligonucleotide

<400> 707
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25

<210> 708
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<212> DNA
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<213> *Treponema pallidum* strain Nichols

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<212> DNA
<213> *Chlamydia trachomatis* strain MoPn

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<210> 714

<211> 1785

<212> DNA

<213> Methanosarcina jannaschii

<400> 714

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<211> 1354

<212> DNA

<213> Porphyromonas gingivalis strain W83

<400> 715

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<210> 716

<211> 1788

<212> DNA

<213> Streptococcus pneumoniae strain Type 4

<400> 716

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<210> 717

<211> 823

<212> DNA

<213> Burkholderia mallei strain GB8

<400> 717

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 <211> 824
 <212> DNA
 <213> Burkholderia pseudomallei strain 1026B

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cacacgccgt	tcttcaacaa	ctaccgtccg	cagttctact	tccgtacgac	ggacgtgacg	720
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<210> 719
 <211> 800
 <212> DNA
 <213> Clostridium beijerincki ATCC 8260

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agaaagagca	acagataagc	cattcttaag	gccaatcgaa	gatgtattca	caattacagg	360
aagaggaaca	gttgcaacag	gaagagttga	agctggagta	cttcatgtag	gagatgaagt	420
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cagaaagtta	ttggatgaag	cacaagctgg	agataacatc	ggagcattat	taagaggagt	540
tcaaagaact	gatattgaaa	gagggtcaagt	tttatcaaaa	ccaaattcag	tacaccctca	600
cactaaattt	gtagggtcaag	tatacgtact	taaaaaagaa	gaaggtggaa	gacatactcc	660
attcttttgat	ggatacagac	cacaattcta	tttcagaaca	acagacgtta	cagggtcaat	720
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attaatcact	ccaatcgcaa					800

<210> 720
 <211> 799
 <212> DNA
 <213> Clostridium innocuum ATCC 14501

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ccagatccaa	ctcgtgaaac	tgacaaacca	ttcctgatgt	ctgtagaaga	cgttatgaca	360
atcacaggac	gtggtacagt	tgctacagga	cgtgttgagc	gtggggtagt	aaaactggga	420
gaagaagttg	aaatcggttg	tatcaaggat	actcagaaaa	ctgttggttac	cggactggaa	480
atgttccgta	agcagctgga	cttcgcagaa	tccggagaca	acatcggtgc	tctgctgcgt	540
gggtatcaacc	gtgaccagat	tcagcgtgga	caggttcttg	ctaaaccagg	atccgtacat	600
ccacacacaa	agttcaaggc	tcaggtttat	gtattaacaa	aagaagaagg	tggaagtcac	660

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actccattcg tttctaacta ccgtcctcag ttctacttcc gtacaactga cgtaactggc 720
gttattacat taccggaagg aactgaaatg gttatgcctg gtgacaacgt tgaaatgaac 780
gttgagctga ttgctccaa 799
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<210> 721
 <211> 789
 <212> DNA
 <213> Clostridium novyi ATCC 19402

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aattactaga attagtagaa atggaagtaa gagaattatt aagcgaatac ggatttgacg 180
gagacgaatg tccagtagta gtaggatacag cattaaaagc aatcgaagaa ggggatgacc 240
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cagatcaacc attcttaatg cctgtagaag atgtatttac aattacagga agaggaaacag 360
ttgcaacagg aagagttgaa agaggagtac tacacgtagg agatgaagta caaatcgtag 420
gaatgaaaga agaaatcgga aagacaacaa tcacaggagt agaaatgttc agaaagatgt 480
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aaatcgaaag aggtcaagta ctagcaaaac caggttcagt aacacctcac aaaaaattcg 600
taggtcaagt ttacgtatta aagaaagaag aaggtggaag acacactcca ttctttaacg 660
gatacagacc acaattctac ttcagaacaa cagacgtaac aggatcaatc gctttaccag 720
aaggagtaga aatggtaatg ccaggagacc atatagacat gaacgtagaa ttaatcacac 780
cagtagcaa 789
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<210> 722
 <211> 798
 <212> DNA
 <213> Clostridium septicum ATCC 12464

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tattagaatt agtagaaatg gaagttagag aattattatc agaatacaac ttcccaggag 180
atgatattcc agtaatcaag ggatcagctt tagtagcatt agaaaaccca acagatgaaa 240
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gaggaacagt tgcaacagga agagttgaaa gaggagttct tcatgtagga gacgaagtag 420
aaatcgttgg attatcagaa gaaagcagaa aagtagtagt aacaggaata gaaatgttca 480
gaaagttact agacgaagca caagctggag ataatgttgg agtactttta agaggtgttc 540
aaagaacaga tatcgaaaga ggtcaagtat tagcaaagac tggatcagtt aagccacaca 600
gcaagttcgt aggtcaagta tacgtactta agaaagaaga aggtggaaga cactatccat 660
tcttcgattg atacagacca caattctact tcagaacaac agacgttact ggatcaatca 720
aattaccaga cggaatggaa atgggttatgc caggagacca cattgatatg aacgttgaat 780
taatcactca agtagcaa 798
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<210> 723
 <211> 799
 <212> DNA
 <213> Clostridium tertium ATCC 14573

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atgatattcc agtaataaag ggttcagctt tacaagcatt agaaaaccca acagatgaaa 240
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gaggaacagt tgctacagga agagttgaaa gaggagttct tcacgtagga gacgaagtag 420
aaatcgttgg attatcagaa gacagcagaa aagtagtagt aacaggaata gaaatgttca 480
gaaagttact agacgaagcg caagctggag acaacgtagg agttctttta agaggagtgc 540
aaagaactga catcgaaaga ggtcaagttt tagcaaaagt tggatcagtt aagccacaca 600
agaaatttgt aggtcaagta tacgtactta aaaaagaaga aggtggaaga catactccat 660
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agttaccaga	tggaatggaa	atgggttatgc	caggagacca	cattgatatg	aacgttgaat	780
taatcactca	agtagctat					799

<210> 724
<211> 801
<212> DNA
<213> *Clostridium tetani* ATCC 19406

<400> 724						
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ttcaaagaga	tgaaatccaa	agagggtcaag	tattagcagc	aacaggatca	gtaaaaccac	600
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cattcttttaa	cggatacaga	ccacaattct	actttagaac	aacagacgta	acagggttcaa	720
tcgcactacc	agaaggagta	gaaatggtaa	tgccaggaga	ccacatagac	atgaaggtag	780
aattaataac	aagagtagca	a				801

<210> 725
<211> 633
<212> DNA
<213> *Enterococcus malodoratus* ATCC 43197

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tttaactaaa	gaagaaggcg	gacgtcatat	tcc			633

<210> 726
<211> 623
<212> DNA
<213> *Enterococcus sulfureus* ATCC 49903

<400> 726						
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acaaaatgga	tatggttgat	gacgaagaat	tattagaatt	agtagaaatg	gaagttcgtg	120
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aagaagggtg	acgtcatact	cca				623

<210> 727

<211> 646
<212> DNA
<213> *Lactococcus garvieae* ATCC 49156

<400> 727
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tgaaatggaa gttcgtgacc tattgtctga atatgacttc ccaggcgacg atgttcctgt 180
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<210> 728
<211> 823
<212> DNA
<213> *Mycoplasma pirum* ATCC 25960D

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<210> 729
<211> 826
<212> DNA
<213> *Mycoplasma salivarium* ATCC 23064

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ttcaagccag aagaaagagc cgaaatgggt gaaatgggtt aaatggacat tcgtgactta 180
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ggaattgaaa tgttccgtaa aaatttaaaa gaagctcaag ctggagataa tgcaggactt 540
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gttactgggt gaattaaatt caaacctgga cgtgaaatgg ttatgcctgg cgaaaatgtt 780
gaatttacag ttactttaat tgctcctatt gcagttgaag aaggaa 826

<210> 730
<211> 810
<212> DNA
<213> *Neisseria polysaccharea* ATCC 43768

<400> 730

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tcgcyaacta ccgyccmcaa ttctacttcc gtacyactga cgtaacgggt gcagttactt 720
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<210> 731

<211> 813

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 13076

<400> 731

```
ctggttgttg ctgcgactga cggccccgatg ccgcagaccc gtgagcacat cctgctgggt 60
cgtcaggtag gcgttccgta catcatcggt ttctgaaca aatgcgacat ggttgatgac 120
gaagagctgc tggaaactggt tgaaatggaa gttcgygaac tgctgtctca gtacgacttc 180
ccggcgacg acactccgat cgttcgtggt tctgctctga aagcgtgga aggcgacgca 240
gagtgggaag cgaaaatcat cgaactggct ggcttctggt attcttacat cccggaacca 300
gagcgtgcga ttgacaagcc gttcctgctg ccgatcgaag acgtattctc catctccggt 360
cgtggtaccg ttgttaccgg tctgttagaa cgcggtatca tcaaagtggg cgaagaagtt 420
gaaatcgttg gtatcaaaga gactcagaag tctacctgta ctggcgttga aatgttccgc 480
aaactgctgg acgaaggccg tgccggtgag aacgtagggt ttctgctgctg tggatatcaa 540
cgtgaagaaa tcgaacgtgg tcaggtactg gctaagccgg gcaccatcaa gccgcacacc 600
aagttcgaat ctgaagtgtg cattctgtcc aaagatgaag gcggccgtca cactccgttc 660
ttcaaaggct accgtccgca gttctacttc cgtactactg acgtgactgg caccatcgaa 720
ctgccggaag gcgtagagat ggtaatgccg ggcgacaaca tcaaaatggg tgttaccctg 780
atccaccgca tcgcaatgga cgacgggtctg cgt
```

<210> 732

<211> 812

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 9184

<400> 732

```
ctggttgttg ctgcgactga cggccccgatg ccgcagaccc gtgagcacat cctgctgggt 60
cgtcaggtag gcgttccgta catcatcggt ttctgaaca aatgcgacat ggttgatgac 120
gaagagctgc tggaaactggt tgaaatggaa gttcgygaac tgctgtctca gtacgacttc 180
ccggcgacg acactccgat cgttcgtggt tctgctctga aagcgtgga aggcgacgca 240
gagtgggaag cgaaaatcat cgaactggct ggcttctggt attcttacat cccggaacca 300
gagcgtgcga ttgacaagcc gttcctgctg ccgatcgaag acgtattctc catctccggt 360
cgtggtaccg ttgttaccgg tctgttagaa cgcggtatca tcaaagtggg cgaagaagtt 420
gaaatcgttg gtatcaaaga gactcagaag tctacctgta ctggcgttga aatgttccgc 480
aaactgctgg acgaaggccg tgccggtgag aacgtagggt ttctgctgctg tggatatcaa 540
cgtgaagaaa tcgaacgtgg tcaggtactg gctaagccgg gcaccatcaa gccgcacacc 600
aagttcgaat ctgaagtgtg cattctgtcc aaagatgaag gcggccgtca cactccgttc 660
ttcaaaggct accgtccgca gttctacttc cgtactactg acgtgactgg caccatcgaa 720
ctgccggaag gcgtagagat ggtaatgccg ggcgacaaca tcaaaatggg tgttaccctg 780
atccaccgca tcgcaatgga cgacgggtctg cg
```

<210> 733

<211> 814

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 8759

```
<400> 733
tggttggtgc tgcgactgac ggyccgatgc cgcagaccgc tgagcacatc ctgctgggtc 60
gtcaggtagg cgttccgtac atcatcgtgt tcctgaacaa atgcgacatg gttgatgacg 120
aagagctgct ggaactggtt gaaatggaag ttcgygaact gctgtctcag tacgacttcc 180
cgggcgacga cactccgatc gttcgtgggt ctgctctgaa agcgttgaa ggcgacgcag 240
agtgggaagc gaaaatcatc gaactggctg gcttcctgga ttcttacatt ccggaaccag 300
agcgtgcat tgacaagccg ttctgctgc cgatcgaaga cgtattctcc atctctggtc 360
gtggtaccgt tgttaccggt cgtgtagaac gcggtatcat caaagtgggc gaagaagtgc 420
aaatcggttg tatcaaagag actcagaagt ctacctgtac tggcgttgaa atgttccgca 480
aactgctgga cgaaggccgt gcyggtgaga acgtagggtg tctgctgcgt ggtatcaaac 540
gtgaagaaat cgaacgtggt caggtactgg ctaagccggg caccatcaag ccgcacacca 600
agttcgaatc tgaagtgtac attctgtcca aagatgaagg cggccgtcat actccgttct 660
tcaaaggcta ccgtccgcag ttctacttcc gtactactga cgtgactggc accatcgaac 720
tgccggaagg cgtagagatg gtaatgccgg gcgacaacat caaaatgggt gttaccctga 780
tccaccgat cgcaatggac gacggtctgc gttt 814
```

```
<210> 734
<211> 828
<212> DNA
<213> Salmonella choleraesuis subsp. choleraesuis ATCC 51955
```

```
<400> 734
ggcgcgatcc tggttggtgc tgcgactgac ggcccgatgc cgcagaccgc tgagcacatc 60
ctgctgggtc gtcaggtagg cgttccgtac atcatcgtgt tcctgaacaa atgcgacatg 120
gttgatgacg aagagctgct ggaactgggt gaaatggaag ttcgtgaact tctgtctcag 180
tacgacttcc cgggcgacga cactccgatc gttcgtgggt ctgctctgaa agcgttgaa 240
ggcgacgcag agtgggaagc gaaaatcatc gaactggctg gcttcctgga ttcttacatt 300
ccggaaccag agcgtgcat tgacaagccg ttctgctgc cgatcgaaga cgtattctcc 360
atctccggtc gtggtaccgt tgttaccggt cgtgtagaac gcggtatcat caaagtgggc 420
gaagaagtgc aaatcggttg tatcaaagag actcagaagt ctacctgtac tggcgttgaa 480
atgttccgca aactgctgga cgaaggccgt gccggtgaga acgtagggtg tctgctgcgt 540
ggtatcaaac gtgaagaaat cgaacgtggt caggtactgg ctaagccggg caccatcaag 600
ccgcacacca agttcgaatc tgaagtgtac attctgtcca aagatgaagg cggccgtcat 660
actccgttct tcaaaggcta ccgtccgcag ttctacttcc gtactactga cgtgactggc 720
accatcgaac tgccggaagg cgtagagatg gtaatgccgg gcgacaacat caaaatgggt 780
gttaccctga tccaccgat cgcaatggac gacggtctgc gtttcgca 828
```

```
<210> 735
<211> 825
<212> DNA
<213> Serratia grimesii ATCC 14460
```

```
<400> 735
ggcgcctatcc tggttggtgc tgcgactgat ggcccaatgc cacagaccgc tgagcacatc 60
ctgctgggtc gtcaggttgg cgttcctttc atcatcgtat tcatgaacaa atgcgacatg 120
gttgatgatg aagagctgct ggaactggta gaaatggaag ttcgtgaact tctgtctgct 180
tatgacttcc ctggtgatga cctgccagtt gttcgtgggt cagcgtgaa agcactggaa 240
ggcgaagctg agtgggaagc taaaatcatc gaactggctg gctacctgga ttcttacatc 300
ccagaaccag agcgtgcat cgacaagccg ttctgctgc caatcgaaga cgtattctcc 360
atctccggyc gtggtacygt agttaccggt cgtgtagagc gcggtatcgt taaagtggc 420
gaagaagtgc aaatcggttg tatcaaagac accgttaagt ctacctgtac tggcgttgaa 480
atgttccgca aactgctgga cgaaggccgt gctggtgaga acgtagggtg tctgctgcgt 540
ggtatcaagc gtgaagacat cgaacgtggt caggtactgg ctaaaccagg ttcaatcaag 600
ccacacacca aattcgactc agaagtttac atcctgagca aagaagaagg tggctgctac 660
actccattct tcaaaggcta ccgtccacag ttctacttcc gtacaactga cgtgaccggt 720
accatcgaac tgccagaagg cgtagagatg gtaatgccag gcgataacgt gaacatgggt 780
gtaaccctga ttcacccaat cgcgatggac gacggtctgc gtttc 825
```

```
<210> 736
<211> 798
<212> DNA
<213> Clostridium difficile ATCC 9689
```

```
<400> 736
tatttagtttg ttcagcaaca gatggacca tggcacaac aagagagcat atactattat 60
caagacaagt tggagtagca tatatagtag tattcttaaa caaatgtgac atggtagatg 120
atgaagagtt attagagtta gtagagatgg aagtaagaga tttattaaca gaatatgatt 180
tcccaggaga tgacactcca atagtaagag gtccagcatt aatggcatta gaagatccaa 240
agagygagtg gggagataag atagtagaat tattcgagca aatagatgag tatataccag 300
ctccagagag agatacagat aaaccattct taatgccagt agaggacgta ttctcaatca 360
caggaagagg aacagttgca acaggaagag tggaaagagg agtactaaaa gtacaagacg 420
aagtagaktt agtaggatta acagaagcac caagaaaagt agtagtaaca ggagtagaga 480
tgttcagaaa attattagac caagcacaag caggggataa tataggagca ttattaagag 540
gagtacaaag aaacgagata gaaagaggac aagtactagc aaagactgga tcagtaaagg 600
cacacacaaa gtttacagca gaagtatatg tacttaaaaa agaagarggt ggaagacata 660
caccattctt tgatggatat agaccacaat tctatttcag aacaacagac gtaacaggag 720
cttgtaagtt accagaagga atagagatgg taatgcctgg agataacgta acaatggaag 780
tagacttaat aaactcaa                                     798
```

```
<210> 737
<211> 411
<212> DNA
<213> Burkholderia pseudomallei strain 1026B
```

```
<400> 737
gtcaacatga tggagctcat caacaacatc gcgaaggagc acggcgggta ctccgtgttc 60
gcgggcggtg gcgagcgtag ccgtgaaggg aacgacttct accacgaaat gaaggactcg 120
aacgttctcg acaaggctcg gctgggtgtac ggccagatga acgagccgcc gggcaaccgt 180
ctgcgcgtgg cgctgacggg cctcacgatg gccgagcact tccgtgacga aggcctcgac 240
gtgctgttct tcgtcgacaa catctaccgt ttcacgctgg ccggtaccga agtgctggcg 300
ctgctcggcc gtatgccgtc ggcagtgggc tatcagccga cgctgggtga agaaatgggc 360
aagctgcaag agcgcacac gtcgacgaag aagggtcga tcacgtcggg t 411
```

```
<210> 738
<211> 394
<212> DNA
<213> Clostridium bifermentans ATCC 638
```

```
<400> 738
tacaagagct tattaacaat atagetactc aacacggtgg tatatcagta ttcgcaggtg 60
ttggagagag aacaagagaa ggtaacgact tattccatga gatgagcgat acaggagtta 120
taaataaaaac agctctagta ttcggacaaa tgaatgagcc acctggagca agaagtagag 180
ttgctttaac tgggtcttaca atggctgaat acttcagaga tcaacaaggg caagacgttt 240
tattattcgt agataatata ttccgtttca ctcaagcagg atctgaggtt tctgcacttc 300
ttggacgtac tccatcagca gttggatacc aaccaacatt agcaacagag atgggtagat 360
tacaagagag aataacatct acaaataaag ggtc                                     394
```

```
<210> 739
<211> 394
<212> DNA
<213> Clostridium beijerincki ATCC 8260
```

```
<400> 739
ttaataaaca acatagctaa acaacatggt ggtttatcag tatttactgg agttgggtgaa 60
agatcaagag aaggtaatga cttatatcat gaaatgagag agtcaggagt tattgataag 120
acagcattag tatttggaca aatgaatgag ccaccgggtg ccagaatgag agttgcatta 180
acaggctcta ctatggcaga gtattttaga gataaagggtc aagatgtgtt actattcata 240
gataacatat tcagatatac tcaagcaggt tcagagggtt cagcattact tggagaaga 300
ccttcagcgg ttggatatca gccaacactt gcaactgaaa tgggtgcact tcaggaaaga 360
attacatcaa cagttaatgg ttctattacg tcag                                     394
```

```
<210> 740
<211> 393
<212> DNA
<213> Clostridium difficile ATCC 9689
```

<400> 740
 ttataaaca tattgctaag caacatgggt gtatttctgt attttcagga gtaggagaaa 60
 gaacaagaga aggtaacgac ctttatggcg aaatgagtga gtctggagtt ataaataaaa 120
 cagctctagt atttggtcaa atgaatgaac cacctggagc gagaatgaga gttgctttaa 180
 ctggacttac aatggcagaa catttttagag atgagcaagg acaagacgtt ttacttttcg 240
 ttgataatat attccgtttc acacaagctg gttcagaagt ttcagcactt ctaggacgta 300
 tgccatcagc tggttggttat cagccaacat tagctactga aatgggtgca cttcaagaga 360
 gaataacatc aactaagaaa gggtcaataa cat 393

<210> 741
 <211> 398
 <212> DNA
 <213> *Clostridium ramosum* ATCC 25582

<400> 741
 ttgattcaag aattcattaa taacattgct acagaacatg gtggttttatc agttttttgct 60
 ggagttgggtg aacgtagccg tgaaggtaat gatttatatt atgaaatgaa ggaaagtggg 120
 gttttatcta aaacaacact agtattttgga cagatgaatg aacccccagg agctcgttta 180
 agagttgctt taacgggtct tactatggca gaagaattcc gtgatgaaca aggtcaggat 240
 gtcttattat tcatcgataa tattttccgt tttactcaag ctggatctga agtatctgcc 300
 ttacttggac ggtaccatc acaagctggg tatcagccaa ctttagcaac cgaaatgggt 360
 gctttacaag aacggattac atcaactaaa aaaggatc 398

<210> 742
 <211> 380
 <212> DNA
 <213> *Clostridium septicum* ATCC 12964

<400> 742
 tagctaagga acacgggtgga ctttcagtat tcacaggtgt tggagaaaga tcaagagaag 60
 gtaatgattt atattacgaa atgaaagaat caggagtatt agacaagaca gctctagtgt 120
 ttggacaaat gaatgaatct ccaggagcta gaatgagagt atctttaaca ggattaacta 180
 tggctgaata tttcagagat caagggtcaag atgtgctttt attcatagat aacataattta 240
 gatttactca agctggatca gaagtatcgg ctttacttgg aagaatacca tcagcagttg 300
 gttatcaacc aacactagca actgaaatgg gtgcacttca agaaagaatt acttcaacta 360
 aaaatggatc aataacttca 380

<210> 743
 <211> 389
 <212> DNA
 <213> *Clostridium tertium* ATCC 14573

<400> 743
 ttaataaata atatagcaaa agagcatggt ggtctttctg tatttacagg agttggagaa 60
 aggtcaagag aaggtaacga cttatattat gaaatgaaag agtcaggggt tatagataag 120
 acagcttttag tattttggaca aatgaatgaa tcaccaggag caagaatgag agtttcatta 180
 actggattaa ctatggctga atattttaga gatcaagggtc aagacgttct tttattttata 240
 gataatatat ttagatttac tcaagcggga tcagaagttt ctgctgttatt aggaagaatt 300
 ccttcagcag ttggatatca accaactctt gcaactgaaa tgggagcact tcaagaaaga 360
 ataacatcaa caaagaatgg atcaatcac 389

<210> 744
 <211> 843
 <212> DNA
 <213> *Comamonas acidovorans* ATCC 15668

<400> 744
 ttcccccgca cgcattgccc aggtgttcga tgccctgaag ctgcacggct cggccctgac 60
 gctggaagtg cagcaactgc tgggtgacgg cggtgtgctg accatcgccc tgggttcgct 120
 cgacgggtct cgctcgcgcc tgatgggtgc caacaccggc aaccccatca ccgtgcccgt 180
 gggcaaggcg acgtctgggtc gcatcatgga cgtgctgggc aatcccatcg acgaacgtgg 240
 tccccgtgat caggcgctga cggctcccat ccaccgcaag gcaccggctt atgacgagct 300

```
gtcgccttcg caggaactgc tggaaaccgg catcaaggtg atcgacctga tctcgccctt 360
cgccaagggc ggcaaggtgg gtctgttcgg tggcgccggg gtgggcaaga ccgtgaacat 420
gatggaactc atcaacaaca tcgccaaggg ccacgggtgg ctgtcgggtg tcgccggtgt 480
gggtgaacgt acccgcggaag gcaatgactt ctatcacgaa atgtcgggac ccggcggtgg 540
caaccaggag tcgctgaacg actccaaggt ggccatgggt tacggccaga tgaacgaacc 600
ccccgggaac cgtctgcgcg tggcgctgac cggcctgacc atggccgaag ccttccgtga 660
cgaaggcaag gacgtgctgt tcttcgtgga caacatctac cgctacacgc tggccggtac 720
cgaagtgtcc gctctgctgg gtccgatgcc ttccgcccgt ggctaccagc ccacgctggc 780
cgaggaaatg ggccgcctgc aagagcgcat cacctcgacc aaggctcggt cgatcacttc 840
cac
```

<210> 745

<211> 819

<212> DNA

<213> *Klebsiella pneumoniae* subsp. *rhinoscleromatis* ATCC 13884

<400> 745

```
gccgtaccac gcggtgtacga agcccttgag gtacagaatg gtaatgaagt tctgggtgctg 60
gaagttcagc agcagctggg cggcggtatc gtacgtacca tcgccatggg ttcttctgat 120
ggctctcgcc gcggtctgga tgtaaaagac ctcgagcacc cgatcgaagt cccggtaggt 180
aagcaaacgc tgggtcgtat catgaacgta ctgggtcaac cggttgacat gaaaggcgac 240
atcggcgaag aagagcggtg ggctatccac cgcgcggcac cgtcctatga agagctgtcc 300
agctctcagg aactgctgga aaccggcatc aaagttatcg acctgatgtg tccgttcgac 360
aagggcggtg aagttgggtc gttcggcggt gcgggtgtag gtaaaactgt aaacatgatg 420
gagctgatcc gtaacatcgc gatcgagcac tccggttact ctgtgtttgc gggcgtaggt 480
gagcgtaact gtgagggtaa cgacttctac cagaaatga ccgactcaa cgttatcgat 540
aaagtatccc tgggtgtacg ccagatgaac gagccgcggg gaaaaccgtc gcgcgttgcg 600
ctgaccggcc tgaccatggc tgagaaatcc cgtgacgaag gtcgtgacgt actgctgttc 660
gtcgataaca tctatcggtt caccctggcc ggtactgaag tatccgcgct gctgggtcgt 720
atgccttcag cggtaggtta tcagccgacc ctggcggaag agatgggcgt tctgcaggaa 780
cgtatcacct ccacaaaaac cggttctatc acctccgta
```

<210> 746

<211> 824

<212> DNA

<213> *Neisseria canis* ATCC 14687

<400> 746

```
gcgattctat tccgcgcgta tatgatgtc ttaaactagt ggatagagaa ctgacgcttg 60
aagtacaaca acagttgggt gatgggtgctg ttcgtactat tgcgatgggt agttccgacg 120
gcctcaaacg aggtttggcg gtagttaaca ccggtgctcc aattacagtg cctgtgggca 180
aagcaacatt aggcggtatt atggacgtat taggtaatcc ggttgatgaa gctgggccga 240
ttggctccga gcaaacccga aacctgctcc taagttcgac gagctttcta 300
gcgccacaga gattttggaa acaggtatta aagtaattga tttgctttgc ccgtttgcca 360
aagggcgtaa agtaggtttg tttgggtggtg cgggagtggg caaaaccgta aatatgatgg 420
agttgattaa caacatcgcg aaagcacaca gcggtttgtc tgtatttgcc ggtgtgggtg 480
aacggacgcy tgaaggtaat gacttttatc atgagatgaa agattccaat gtattagata 540
aagtagccat ggtttacggg catgatgaac agcctcccgg taaccgtttg cgcgttgccg 600
taactggctt gtctatggcc gaattcttcc gtgacgagaa agatgaaaac ggtaaaggcc 660
gtgatgtatt gttctttgta gacaatatcc accgctatac ctagccgggt acagaagtat 720
ctgcattgct tggccgcatg ccttcggcag taggttatca gccgacgttg gcagaggaaa 780
tgggcccgtt gcaagagcgt attacytcam cccaaacagg ctct
```

<210> 747

<211> 831

<212> DNA

<213> *Neisseria cinerea* ATCC 14685

<400> 747

```
cgcgacgcta tcccgcatgt ttacgatgcc ctgaaattgg acgagaacgg tctgactctg 60
gaggttcaac agcttctggg cgacggcggt gtccgtacta ttgcaatggg tagttcagac 120
ggccttaaac gcggtatgtc tgtaagcaat actgggtgcgc caatcactgt gccggttaggt 180
aaaggtacat tgggtcgtat tgtcgacgta ttgggtacgc ctgttgatga agcaggtccg 240
```

```

atcgataccg acaaaagccg tgccattcac caaactgctc cgaaattcga cgagttgtct 300
tcagctaccg aattggttga aaccggtatt aaagtgatcg acttgctgtg tccgtttgct 360
aaaggcggta aagtaggtct gttcgggtgg gccggtgtgg gcaaaaccgt gaacatgatg 420
gaattgatca acaacatcgc caaagcgcac agcgggtctgt ccgtgttcgc aggtgtgggt 480
gagcgtaccc gtgaaggtaa cgacttctac cagcagatga aagattccaa cgtattggat 540
aaagtagcca tgggtgatgg ccaaataaac gaacctccgg gcaaccgtct gcggtttgct 600
ttgaccgggt tgactatggc cgaatacttc cgtgacgaaa aagacgaaaa cggtaaaggc 660
cgcgacgtat tgttcttcgt tgacaacatc taccgttaca ctttggccgg tactgaagta 720
tctgcactgt tgggcccgtat gccttctgca gtgggttacc aaccgacatt ggctgaagaa 780
atgggtcgtt tgcaagagcg tattacctct acccaaaccg gttccattac t 831

```

<210> 748

<211> 862

<212> DNA

<213> *Neisseria cuniculi* ATCC 14688

<400> 748

```

ccgtggccaa gtaccacaaa tttatgacgc actgagtgtt gatggcaccg aaacaacctt 60
ggaagttcaa cagcagttgg gtgatggcgt ggtgcgtacc attgcatggg gttcaaccga 120
aggcttgaag cgtggtttga ctgtatctaa ctctggtgca ccgatttctg tgccagtggtg 180
tcaagcgact ttgggtcgtt ttatggatgt gttgggtcgt ccaatcgacg aggcaggtcc 240
tgtaaatgct caagaaaaat ggtcaattca ccgtgaagca ccaagctatg atgagcaatc 300
aaactcaact gagctgctag aaacaggcat caaagtaatt gatttgcctt gcccatattg 360
taaaggtggg aaagtgggct tgttcgggtg tgcaggtgtg ggtaaaaccg tgaatatgat 420
ggagctgatt aataatatcg ctctgaagca ttcaggtcct tctgtttttg caggtgttgg 480
tgagcgtact cgtgagggtg acgattttta tcacgaaatg caagaagcag gcgttggtta 540
taccgaagac ttcaccaagt caaaagtagc gatggtttat ggtcagatga atgagccacc 600
aggaaaccgt ttgctgtgtg cattgacagg cttgacgatg gcagaatatt tccgtgacga 660
aaaagatgaa gcaacaggca aagggcgtga tgttctattg ttcgttgata acatctatcg 720
ttacacactg gctggtacgg aagtgtcagc acttctaggt cgtatgccat cagcagtagg 780
ttatcaaccg actctggctg aagaaatggg tgcgttgcaa gagcgtatta cctcaacgca 840
atcgggttcg atcacttcgg gg

```

<210> 749

<211> 844

<212> DNA

<213> *Neisseria elongata* subsp. *elongata* ATCC 25295

<400> 749

```

ggaactccca cgtgacgcta tcccgcattg ttttgatgca ttaaaattag ttgaaaatga 60
cctaaccctta gaagttcaac aacttttggg ggatgggtga gtgcgtacca ttgcatggg 120
tagttcagat ggattaaagc gtgggtatggc tgtgaataat accggagctc cgattactgt 180
tccgtgtggc cgtgaaactt tgggtcgtat catggatgta ttgggtaatc cggttgatga 240
ggcaggtccg gtaaatgcat ccaatacacg tgcgatccat caagaggctc ctaagtttga 300
tgagctttct tcaacaacgg aattattaga aactggcatt aaggttatcg acttggtatg 360
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tacggaagta tccgcattgc tgggtcgtat gccttcagca gtaggttacc aaccgacatt 780
ggctgaagaa atgggtcgtt tgcaagagcg tattacctct acccagacag gctctattac 840
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<210> 750

<211> 834

<212> DNA

<213> *Neisseria flavescens* ATCC 13120

<400> 750

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<210> 751
 <211> 834
 <212> DNA
 <213> *Neisseria gonorrhoeae* ATCC 31426

<400> 751						
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cgtgacgtat	tgttcttcgt	tgacaacatc	taccgttaca	ctctggccgg	taccgaagta	720
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<210> 752
 <211> 825
 <212> DNA
 <213> *Neisseria gonorrhoeae* ATCC 27628

<400> 752						
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tgaacgcggg	catgactgtg	agcaatactg	gttcgcccat	tactgtgccg	gtaggtaaa	180
gtacgttggg	acgcattgtc	gatgtattgg	gaacgcctgt	tgacgaggca	ggtccaattg	240
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caaccgaatt	gctcgaaacg	ggcattaaag	tgattgactt	gctgtgtccg	tttgccaaag	360
gcggtaaagt	aggtctgttc	ggcgggtgcc	gtgtgggtaa	aaccgtgaac	atgatggaat	420
tgatcaacaa	catcgccaaa	gcgcacagcg	gcttgtccgt	gttctcaggc	gtagggtgagc	480
gtaccgcgca	aggtaacgac	ttctaccacg	agatgaaaga	ttccaacgta	ttggataaag	540
tagccatggg	gtatggccaa	atgaacgaac	ctccaggcaa	ccgtctgcgc	gttgctttga	600
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cactgttggg	ccgtatgcct	tctgcagtgg	gttaccaccc	gacattgggt	gaagaaatgg	780
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<210> 753
 <211> 831
 <212> DNA
 <213> *Neisseria lactamica* ATCC 23970

<400> 753						
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ctgaaacgcg gcatgtctgt cagcaatacc ggtgcgccaa tcaactgtgcc ggtaggtaaa 180
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cgtaccgcgc aaggtaacga cttctaccac gagatgaaag attccaacgt attggataaa 540
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gacgtattgt tcttcgtgga caacatctac cgttacaccc tggccgggtac cgaagtatcc 720
gcaactgttg gccgtatgcc ttccgcagtg ggttaccacac cgacattggc tgaagaaatg 780
ggtcgtttgc aagagcgtat tacctctacc caaacccggt ccattacttc c 831

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<210> 754

<211> 836

<212> DNA

<213> *Neisseria meningitidis* strain 2241C

<400> 754

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ttggaagtcc aacagctttt gggcgacggc gtagtccgta ccattgcgat gggcagctcg 120
gacggtttga aacgcggcat gactgtgagc aataccgggtg cgcccattac tgtgccggta 180
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gtatccgcat tgttgggccc tatgcccgtc gcagtgggct accaaccgac attggcagaa 780
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<210> 755

<211> 837

<212> DNA

<213> *Neisseria mucosa* ATCC 19696

<400> 755

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gatggtttga aacgcggcat gactgtaagc aatacagggtg cgccgattac agtaccggta 180
ggtaaaaggta ctttgggacg tattgtcgat gtattgggta cgctgtttga cgaagcaggt 240
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tctgcgacta ctgagctgct ggaaaccggc attaaagtga ttgacttgct gtgtccgttt 360
gccaaaggcg gtaaagtagg tctgttcggc ggtgccgggtg taggcaaaac cgtcaacatg 420
atggaattaa ttaacaacat cgccaaagca catagcggtt tgtccgtgtt tgcagggtgtg 480
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gtatccgcat tgttgggtcg tatgccttca gcagtagggt accaaccgac attggctgaa 780
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<210> 756

<211> 834

<212> DNA

<213> *Neisseria subflava* ATCC 14221

<400> 756

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gaagttcaac agcttctggg tgacggcggt gtccgtacta ttgcaatggg tagttcagac 120

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ggcctgaaac	gcggcgatgc	tgtaagcaat	actggtgctg	caatcactgt	gccggtaggt	180
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atcgataccg	acaagagccg	tgccattcac	caaactgctc	cgaaattcga	cgagttgtct	300
tcaactaccg	aattgctgga	aaccggtatt	aaagtgatcg	acttgctgtg	tccgtttgct	360
aagggcggtg	aagtaggtct	gttcggtggg	gccggtgtgg	gcaaaaccgt	gaacatgatg	420
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ttgaccgggt	tgactatggc	cgaatacttc	cgtgacgaaa	aagacgaaaa	cggtaaaggt	660
cgcgacgtat	tgttcttcgt	tgacaacatc	taccgttaca	ctctggccgg	taccgaagta	720
tctgcactgt	tgggcccgtat	gccttctgca	gtgggttacc	aaccgacatt	ggctgaagaa	780
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<210> 757

<211> 833

<212> DNA

<213> *Neisseria weaveri* ATCC 51223

<400> 757

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cggcctaaaa	cgtgggtatg	ctgttaacaa	taccggcgct	ccgattactg	ttccgggtgg	180
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tggttgatca	gaagaaactc	gcgctattca	tcaagctgcc	cctaaatttg	acgaactgtc	300
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gtctgcactg	ttaggtcgta	tgccgtctgc	agtaggttat	cagcctacat	tggcagaaga	780
aatgggtcgc	ttgcaggagc	gtattacttc	tactcaaaca	ggttcgatta	ctt	833

<210> 758

<211> 833

<212> DNA

<213> *Neisseria animalis* ATCC 19573

<400> 758

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gaagtacaac	aacttctggg	cgacggtgtg	gtacgtacca	ttgcaatggg	tagttcagac	120
ggcctgaaac	ggggtttgtc	tgtagagcat	accggttctc	cgattgccgt	tcctgtcggt	180
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aaaggcggtg	aagtaggtct	gttcggcggt	gccggtgtgg	gcaaaaccgt	aaacatgatg	420
gaattgatca	acaacatcgc	caaagcacac	agcggctctg	ctgtgtttgc	cggtgtaggt	480
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cagcattggt	gggcccgtatg	ccgtctgcag	taggttatca	gccgacattg	gcagaggaaa	780
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<210> 759

<211> 819

<212> DNA

<213> *Proteus penneri* ATCC 33519

<400> 759

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ggtttaagcc  gtggcttaaa  agttgaagat  ttaggccacc  caattgaagt  accagtaggt  180
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attgcaactg  aagaacgttg  gtctattcac  cgtgaagcac  caacctacga  agagttatca  300
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atgccatcag  cggtaggtta  ccagccaaca  ttggctgaag  agatgggtgt  tctgcaagaa  780
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<210> 760

<211> 819

<212> DNA

<213> *Salmonella choleraesuis* subsp. *choleraesuis* ATCC 13076

<400> 760

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<210> 761

<211> 812

<212> DNA

<213> *Yersinia pestis* strain KIM D27

<400> 761

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atcagcggtc  gggtatcagc  caacactggc  tgaagagatg  ggtgtgttgc  aggaacgtat  780
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<210> 762

<211> 408

<212> DNA

<213> *Burkholderia mallei* strain GB8

<400> 762

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cgacgtgatc  gagcccttct  tcgtcgacgt  gatgcgctct  tgcagcttgc  ccatttcttc  60
agccagcgtc  ggctgatagc  ccactgccga  cggcatacgg  ccgagcagcg  ccgacacttc  120

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ttcgtggtag aagtcgttcc cttcacgggt acgctcgccc acgcccgcga acacggagta 360
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<210> 763

<211> 400

<212> DNA

<213> *Clostridium sordellii* ATCC 9714

<400> 763

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cgtactccat cagcagttgg ataccaacca acattagcta cagagatggg tagattacaa 360
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<210> 764

<211> 405

<212> DNA

<213> *Clostridium novyi* ATCC 19402

<400> 764

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<210> 765

<211> 393

<212> DNA

<213> *Clostridium botulinum* strain 20:3.1

<400> 765

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<211> 399

<212> DNA

<213> *Clostridium histolyticum* ATCC 19401

<400> 766

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cattgacagg acttactatg gcagaatatt ttagagatca agggcaagat gtacttttat 240
ttatagataa tatattttaga ttacgcagg ctggttctga agtttctgca ttgttaggaa 300
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aaagaataac atccacaaaa aatggatcaa ttacttcag 399
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<210> 767
 <211> 390
 <212> DNA
 <213> *Peptostreptococcus prevotii* ATCC 9321

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 gttgttcgtc gacaacatct accgttacac cctggccggg actgaagtat ccgcactgct 300
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 gcaagaacgt atcacttcga ccaaggaagg 390

<210> 768
 <211> 953
 <212> DNA
 <213> *Absidia corymbifera* ATCC 46775

<400> 768
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 atcaagtcca agggcactcg tgctatccac gctgatgctc ccgagttcgt tgatcaatcc 180
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<210> 769
 <211> 1343
 <212> DNA
 <213> *Alternaria alternata* ATCC 62099

<400> 769
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 accaagtacg ctcccattca cgcgcagccc ccgagttca ccgagcaatc cacctccgct 180
 gaggtcctcg ttaccgggtat caagggtgtc gacctgttgg ctccttacgc tcgtgggtgga 240
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<210> 770
<211> 480
<212> DNA
<213> *Aspergillus flavus* ATCC 26947

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<210> 771
<211> 1174
<212> DNA
<213> *Mucor circinelloides* ATCC 38592

<220>
<221> misc_feature
<222> (156)..(157)
<223> n represents any nucleotide

<400> 771
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<210> 772
<211> 467
<212> DNA
<213> *Piedraia hortai* ATCC 24292

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467

<210> 773
<211> 578
<212> DNA
<213> *Pseudallescheria boydii* ATCC 44331

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<210> 774
<211> 1123
<212> DNA
<213> *Rhizopus oryzae* ATCC 56015

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<213> *Scopulariopsis koningii* ATCC 38745

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<210> 776
<211> 610

<212> DNA
<213> *Trichophyton mentagrophytes* ATCC 8125

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tacctccgtc 610

<210> 777
<211> 593
<212> DNA
<213> *Trichophyton tonsurans* ATCC 56185

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<212> DNA
<213> *Trichosporon cutaneum* ATCC 62965

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c 1141

<210> 779
<211> 1093
<212> DNA

<213> *Cladophialospora carrionii* ATCC 22864

<400> 779

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<210> 780

<211> 752

<212> DNA

<213> *Cunninghamella bertholletiae* ATCC 42115

<400> 780

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<210> 781

<211> 728

<212> DNA

<213> *Curvularia lunata* ATCC 26425

<400> 781

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cgtcaaga						728

<210> 782
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<212> DNA
<213> *Fonsecaea pedrosoi* ATCC 18831

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<210> 783
<211> 1151
<212> DNA
<213> *Microsporum audouinii* ATCC 11347

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<211> 979
<212> DNA
<213> *Mucor circinelloides* ATCC 38592

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<210> 785
 <211> 1099
 <212> DNA
 <213> *Phialophora verrucosa* ATCC 38561

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<210> 786
 <211> 750
 <212> DNA
 <213> *Saksenaea vasiformis* ATCC 60625

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<210> 787
 <211> 1084
 <212> DNA

<213> *Syncephalastrum racemosum* ATCC 32330

<400> 787

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<210> 788

<211> 1155

<212> DNA

<213> *Trichophyton tonsurans* ATCC 56185

<400> 788

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<210> 789

<211> 1138

<212> DNA

<213> *Trichophyton mentagrophytes* ATCC 8125

<400> 789

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<211> 748

<212> DNA

<213> *Bipolaris hawaiiensis* ATCC 26067

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<211> 958

<212> DNA

<213> *Aspergillus fumigatus* ATCC 14110

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<210> 792

<211> 936

<212> DNA

<213> *Trichophyton mentagrophytes* ATCC 8125

<400> 792

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gatgatttgc aagaccctcc accccattgc tgccga 936

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<210> 793
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<220>
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<400> 793
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<210> 794
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<210> 796
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<220>
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<210> 797
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<220>
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Oligonucleotide

<400> 797
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<210> 798
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<220>
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Oligonucleotide

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<210> 799
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<220>
<223> Description of Artificial Sequence:
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<400> 799
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<210> 800
<211> 24
<212> DNA
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<220>
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<400> 800
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<210> 801
<211> 20
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<220>
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<400> 801
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<210> 802
<211> 20
<212> DNA
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 802
ttgccatttc tggtttcggt 20

<210> 803
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 803
acttcagtgg taacaccagc 20

<210> 804
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<212> DNA
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<220>
<223> Description of Artificial Sequence:
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<400> 804
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<210> 805
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<213> Artificial Sequence

<220>
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<210> 806
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<212> DNA
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<220>
<223> Description of Artificial Sequence:
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<210> 807

<211> 20
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<220>
<223> Description of Artificial Sequence:
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20

<210> 808
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<223> n represents a modified base

<220>
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<223> n represents a modified base

<220>
<221> modified_base
<222> (3)..(3)
<223> i

<220>
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<222> (7)..(7)
<223> i

<400> 808
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24

<210> 809
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<212> DNA
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 809
tcttcctgtw gcaactgttc ctct

24

<210> 810
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
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<400> 810
agagmwacag ataarscatt ctta 24

<210> 811
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<212> DNA
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 811
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<210> 812
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<212> DNA
<213> Artificial Sequence

<220>
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Oligonucleotide

<220>
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<222> (3)..(3)
<223> n represents a modified base

<220>
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<222> (6)..(6)
<223> n represents a modified base

<220>
<221> misc_feature
<222> (9)..(9)
<223> n represents a modified base

<220>
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<222> (21)..(21)
<223> n represents a modified base

<220>
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<222> (24)..(24)
<223> n represents a modified base

<220>
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<223> i

<220>
<221> modified_base
<222> (6)..(6)
<223> i

<220>
<221> modified_base
<222> (9)..(9)
<223> i

<220>
<221> modified_base
<222> (21)..(21)
<223> i

<220>
<221> modified_base
<222> (24)..(24)
<223> i

<400> 812
gtnacnggnt cytyrarrrt nccncc

26

<210> 813
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 813
aatcygtyga aatgcaycac ga

22

<210> 814
<211> 20
<212> DNA
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<220>
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<222> (3)..(3)
<223> n represents a modified base

<220>
<221> misc_feature
<222> (15)..(15)
<223> n represents a modified base

<220>
<221> modified_base
<222> (3)..(3)
<223> i

<220>
<221> modified_base
<222> (15)..(15)
<223> i

<400> 814
gcnggcacgt acacngcctg

20

<210> 815
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 815
tggtgcatyt ckacrgactt 20

<210> 816
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 816
gctacgacga gatcaagggc 20

<210> 817
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 817
tggaagaagg ccgaggagtt 20

<210> 818
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 818
agccgggctg gatcttcttc 20

<210> 819
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 819
tcgagcttct ggaggaagag 20

<210> 820
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:

Oligonucleotide

<400> 820
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<210> 821
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 821
ggcgcaaacg tcaccacatc a 21

<210> 822
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 822
cggcggatgt ccttaacaga a 21

<210> 823
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 823
gagcggtatg aygagattgt 20

<210> 824
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 824
ggcttctgcg gcaccatgcg 20

<210> 825
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 825
atgagcargc saaccatcgt tcagtg 26

<210> 826
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 826
tcgatcgtgc cgaccatgta gaacgc 26

<210> 827
<211> 446
<212> DNA
<213> Clostridium novyi ATCC 19402

<400> 827
caccaacttg ctaaatgggg agatgccag attgttgat atataggctg tggagaacgt 60
ggaaatgaaa tgacagatgt tcttaatgag tttccagaac ttaaagatcc taagactggc 120
aaatcaataa tggaaagaac agttttaata gcaaatactt ctaatatgcc agttgcagcc 180
cgtgaagctt gtatatatac aggaatcaca atagcagaat attttagaga tatgggatat 240
tcagtagcac ttatggcgga ttccacttca cgttgggcag aggcattaag agaaatgtct 300
ggaagacttg aagaaatgcc tggatgatga gggtaccag cttatttagg atcaagactt 360
gctgatttct atgaaagagc tggaaaagtt gtgtgtttag gagacgatga aagagaaggt 420
gccattactg caataggtgc tgtatc 446

<210> 828
<211> 445
<212> DNA
<213> Clostridium difficile ATCC 9689

<400> 828
cagcatcagc ttgctaaatg ggcagatgca gatatagttg tatatatagg ctgtggcgag 60
cgtggaaatg aaatgacaga tgttcttctt gaatttcctg aattaaaaga cccaagaaca 120
ggcagatcac ttatgcaaag aactgtgctt atagcaaata catcagatat gccggttgct 180
gcacgtgaag cttctatata cactggtatt acaatagctg aatatttttag agatatggga 240
tatagtgttg cacttatggc agactctaca tcaagatggg ctgaggctct tagagagatg 300
agtggtcggt tagaggagat gcctggtgaa gaaggttatc ctgcatactt aggttcacgt 360
cttgctcaat tctatgagag agcaggaaag gtaaattgtc taggtatgga tgaaagagaa 420
ggaacactta cagcaattgg tgcag 445

<210> 829
<211> 445
<212> DNA
<213> Clostridium septicum ATCC 12464

<400> 829
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gtaacgaaat gacagacgtt cttaacgaat tcccagaact tattgaccca aaaactgggg 120
aaagttaaat gaagagaaca gtacttatag ctaatacttc aaacatgcca gttgctgcta 180
gagaagcttg catatacaca ggtattacaa tagctgaata ctccagagat atgggatact 240
cagtatctat aatggctgat tcaacttcaa gatgggcaga agcattaaga gaaatgtcag 300
gtagacttga agaaatgcca ggtgatgaag gatattccagc gtacttagga tcaagacttg 360
ctgattatta cgaaagagca ggtaagggtt tttgtctagg taaagatggt agagaaggtg 420
ctgtaacagc aattggagct gtatc 445

<210> 830

<211> 444
<212> DNA
<213> Clostridium botulinum strain 20:3.1

<400> 830
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aagcttaatg aagagaacag ttcttatagc taatacttca aacatgccag ttgcagcgag 180
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tagacttgaa gaaatgcctg gtgatgaagg atatccagct taccttggat caagacttgc 360
tgattactat gaaagagctg gtaagggtga atgttttaggt aatgatggaa gaattggttc 420
tataacagca atcgggtgcg tate 444

<210> 831
<211> 456
<212> DNA
<213> Clostridium perfringens ATCC 13124

<400> 831
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gagaacgtgg taacgagatg acagacgttc ttaacgaatt cccagaactt aaagacccta 120
aaactgggga aagcttaatg aagagaacag ttcttattgc taatacatct aacatgccag 180
ttgctgccag agaagcatca atatatagc gtataacaat agcagagat ttcagagata 240
tgggatactc agtatcaatc atggctgact caacttcacg ttgggagag gctttaagag 300
aaatgtcagg aagacttgaa gaaatgccag gagacgaagg ttaccagca tacttaggat 360
caagacttgc tgattactat gaaagagctg gtaaggtgt agcttttaggt aaagatggaa 420
gagaaggagc tgttacagct atcgggagc tatccc 456

<210> 832
<211> 444
<212> DNA
<213> Clostridium tetani ATCC 19406

<400> 832
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aaatgaaatg acagacgttt taaatgagtt cccagaatta aaggatccta aaaccgggga 120
atcttttaatg aaaagaactg tgtaaatagc aaatacatct aatatgcctg ttgcagctag 180
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aagactagag gagatgccag gtgaagaagg ttatccagct tatttaggat ctagattagc 360
agagttctat gaaagagcag gtaatgttat atgttttaggt caggatggaa gagaaggagc 420
attaacagct ataggagcag tttc 444

<210> 833
<211> 1786
<212> DNA
<213> Streptococcus pyogenes

<400> 833
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aatgcgctcg cgatcaagcg tctattcagg tttatgagga aacatcaggg atcgggtccag 180
gagaaccagt agtgactact ggttgctcct tgtcggtcga gttaggcccg ggcctgattt 240
cagaaatgtt tgacgggtatt cagcgaccgc ttgatcgttt tcaaaaagca acggacagcg 300
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ttcccaagct aagtgttggt caagaagtag ttgcagggtga tatttttagga actgtgcaag 420
aaacagctgt cattgagcac cgtatcatgg ttccttataa agtttcaggg accttggtgg 480
ctattcatgc aggggacttc acagtaacag atacagttta tgaaattaag caggaagacg 540
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tccctgttac aaaagggtgg gccgctgccg ttctgggacc atttggggca ggaaaaacag 720
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gggaacgcgg caacgagatg accgacgttt tgaatgagtt tccagagtta attgacccaa 840
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cttattttta tgagattatg gaaggcactg ctcaggtagc cgatcgcatc gcacgcagca 1680
aatttatccc agaagaaaac ttagagcaga ttaaagggtt tactcagaag gttaccaaa 1740
agattcacca cgttttagca aaggaggaa ttagatgag cgttct 1786

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<210> 834

<211> 499

<212> DNA

<213> Babesia bovis strain Suarez-3

<400> 834

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acgcacttgc ttgggtggcca atacttcaaa catgccagtg gccgccaggg aggctagtat 240
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<210> 835

<211> 464

<212> DNA

<213> Cryptosporidium parvum

<400> 835

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gcgccagact tgcttcattc tatgaaagat caggaagagt taaatgtatg gggtcccccag 420
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<210> 836

<211> 446

<212> DNA

<213> Leishmania infantum strain MOU

<400> 836

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ggctccgcta cgatcgctcg tgccgt 446

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<210> 837
<211> 456
<212> DNA
<213> Leishmania major ATCC 50122

<400> 837
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atggctcgca ggagtcacatc atgaagcgca cctgcctcgt ggcaaacact tcgaacatgc 180
cagtcgcagc ccgcgaggcc tctattttaca ccggcatcac cctggccgag tactaccgtg 240
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agcgccaggg ctccgtcacg atcgtcgggt ctgtgt 456

<210> 838
<211> 450
<212> DNA
<213> Leishmania tarentolae strain MOU-2

<400> 838
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gtgaggagtc gatcatgaag cggacctgcc tcgtggccaa cacctccaac atgccagtcg 180
cagcccgtga agcctctatt tacactggta tcacctggc cgaatactac cgtgatattg 240
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agggtccgt cagcatcgtc ggtgcctgtg 450

<210> 839
<211> 437
<212> DNA
<213> Trypanosoma brucei subsp. brucei strain EATRO795

<400> 839
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gaggagtcta tcatgaagcg cacatgcctg gtggcaaata cttccaatat gcctgttgct 180
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tccggtcgtc ttgctgaaat gcctgcagat ggaggttatc ccgctacat cagcgcccg 360
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gggtctgtaa caattgt 437

<210> 840
<211> 1052
<212> DNA
<213> Trypanosoma cruzi strain MM3

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ccaagtctgt gttcacgac atcgacgccc ccggccaccg cgacttcac aagaacatga 120
tcacgggcac gtctcaggcg gacgccgccc tccttgatc tgctgcatcg cagggtgagt 180
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agatcgggcg tatcgggcacc gtgccggtcg tctcgtgga gacgggcacg atgaagcccc 600
gcgacgtggg gacgtttgcg cccgccaacg tgacgacgga ggtgaagtcg attgagatgc 660

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accacgagca gctggccgag gccacgccc gcgacaacgt cggcttcaac gtgaagaacg 720
tgtccgtgaa ggacatccgc cgtggcaacg tgtgcccga ctcgaagaac gaccccccaa 780
aggaggcggc cgacttcacg gcgcaggtga tcctcctgaa ccaccccggc cagatcggca 840
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tcgagtccaa gatcgaccgc cgctccggca aggagcttga gaagaacccc aagtcgatca 960
agtccggtga cgccgccatg gtgcgcatgg tgccgcagaa gcccattgtg gtggaggtgt 1020
tcaacgacta cgctcctctt ggccgctttg cc 1052

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<210> 841
 <211> 1061
 <212> DNA
 <213> Trypanosoma cruzi strain CGL-1

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<400> 841
tgaaggctga gcgcgagcgc ggcatacaga tcgacatcgc gctctggaag ttcgagtcgc 60
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tcacgggcac gtctcaggcg gatgccgcgc tccttgtcat tgcgtcatcg caggggtgagt 180
ttgaggcggg catctcgaag gacggccaga cgcgcgagca cgcgctgctc gccttcacgc 240
tcggcggtgaa gcagatggtt gtgtgctgca acaagatgga cgacaagtgc gtgaactttg 300
cccaggagcg ctacgatgag attgtgaagg aggtgtcggc gtacctgaag aaggttgggt 360
acaacgtgga gaaggtgcgc ttcaccccca tctccggctg gcagggcgac aacatgattg 420
acaagtcgga aaatatgccg tggatacaagg gcccacgctc gctggaggca ctcgacatgc 480
tgagagcccc ggtgcgcccc agcgacaagc cgctgcgcct gccgctgcag gatgtgtaca 540
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gcgacgtggt gacgttttgc cccgccaaac tgacgacgga ggtgaagtgc attgagatgc 660
accacgagca gctggccgag gccacgcccg gcgacaacgt cggcttcaac gtgaagaacg 720
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agtccggtga cgccgccatg gtgcgcatgg tgccgcagaa gcccattgtg gtggaggtgt 1020
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<210> 842
 <211> 1062
 <212> DNA
 <213> Trypanosoma cruzi strain PCU-1

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<400> 842
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gatcacgggc acgtctcagg cggacgcccgc cgtccttgtc attgcgtcat cgcaggggtga 180
gtttgaggcg ggcattctga aggacggcca gacacgcgag cacgcgctgc tcgccttcac 240
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cgcccaggga cgctacgatg agattgtgaa ggaggtgtcg gcgtacctga agaagggttg 360
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tgacaagtgc gaaaatatgc cgtggtacaa gggccccacg ctgctggagg cactcgacat 480
gctggagccc ccggtgcgcc ccagcgacaa gccgctgcgc ctgcgctgc aggacgtgta 540
caagatcggc ggtatcggca ccgtgccggt cggctcgcgt gagacgggca cgatgaagcc 600
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gatcgagtcc aagatcgacc gccgctccgg caaggagctt gagaagaacc ccaagtcgat 960
caagtccggt gacgcccga tggtgcgcat ggtgccgcag aagcccatgt gcgtggaggt 1020
gttcaacgac tacgtcctc ttggccgctt tgccgtgcgt ga 1062

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<210> 843
 <211> 1057
 <212> DNA
 <213> Babesia bovis strain Suarez-3

<400> 843
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 acatgttgaa tatgagacta agaaccgtca ttacgggtcac gtggactgtc cagggtcactc 180
 tgattatgtg aagaacatga tatctggcgc tgctcagatg gatggtgcca tattggttgt 240
 ttcttgtgtt gacgggtccca tgcctcagac taaggagcac gtgttgcttg ctaagcagat 300
 tgggtgtacct cgttttagttg tgtttttgaa caagcttgac atgttagagg actctgagct 360
 attggagttg gtggagttag aggttcgtga gttattgagt gagtttggtt acgacgggtga 420
 caacacgcct atcgttcgtg gcagtgctat aaaggcattg aacagtagtt ccgagggtga 480
 cattaagcca attcaggatt tattggatgc gtgtgatgcc tttttactga ctccagaacg 540
 taaggatgac atgccgctct tgggtgctat tgacgatgtt cttggccattc ctggcaaggg 600
 tactgttgta accggtagga tagagcaggg tgtgtgtgtt ggtcttrara tgttccgcaa 720
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 gtctaactac cgtcctcagg cgtttatcac tactggagac gtttgctgct cagttcattt 1020
 ggatragggg gttgagatgg cagctcctgg tgacaacgtg cgttgcaaga tcaagttact 1057
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<210> 844
 <211> 943
 <212> DNA
 <213> Leishmania aethiopica ATCC 50119

<400> 844
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 cctgatctgc tcgcagattg ggcttccggc gctcgtaggg ttcacaaaca aagtggatat 120
 gacggacgag gacacgtgcg acctggtgga catggagggtg ccgcagcagc tggagaaata 180
 caagtttccg gcggaggaga caccaatcgt gcgcggctcg gccctcaagg ccgtcgaggg 240
 cgacgcgaag tacgaggaga acatcctcga actggtgcgg aagtgcgacg agtggatccc 300
 cgaccgcggc cgcaacacag acaagccttt ccttatggcc atcgagcacg tttacgagat 360
 cggcaaggac aagaagagcg tcatcgtgac cggccgcgctc gatcagggcg tgctgaagct 420
 caacacagac gccgagctgg ccggcttcag cgccaagaag tcgacggtga ggtgacggg 480
 catcgagatg taccacaaga cgctgagcga gtgcatgccc ggtgactccg tcggcgctcag 540
 cattgtcggc accggcgaca caaccagtct gtccaaggac aacgtggaac gcggcatggt 600
 aatggcggcg acgggtagca cgaacctgta caacaagggtg aaggcgcagg tgtacgtgct 660
 gacgaaggat gagggcgggc gccacaccgg cttcagcccc cactaccgcc cgcagctctt 720
 cttccattgc gctgacgtga cagcggacat gagcttcccc gagggcgaga agcaccggga 780
 ggagctgaac aagaaattcg gccgcggccc cgaggaggac aagaagaaag aggcggagat 840
 gaaggagttc gagagcaagc tcgtctgcat gccggggcat aaccgcgagc tgatcctgac 900
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<210> 845
 <211> 939
 <212> DNA
 <213> Leishmania amazonensis ATCC 50131

<400> 845
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 gacggacgag gacacgtgcg acctggtgga catggagggtg cgtgagcagc tggagaaata 180
 caagtttccg gcggaaagaga cgccatcgt gcgcggctcg gccctcaaag ccgtcgaggg 240
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 cgaccgcggc cgcaacacag acaagccttt ccttatggcc attgagcacg tgctgaagct 360
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 aatggcggca acgggtagca cgaacctgta caacaagggtg aaggcgcagg cgcagctctt 660
 gacgaaggat gagggcgggc gccacactgg cttcagcccc cactaccgcc cgcagctctt 720
 cttccattgt gctgacgtga cggcgagacat gagcttcccc gagggcgaga agcaccgcga 780
 ggagctcaac aagaaattcg gccgcggccc cgaggaggac aagcagaagg aggcggagat 840
 gaaagagttc gagagcaagc tcgtctgcat gccggggcag aaccgcgagc tgatcctgac 900

gctggcgtag cccgatgccca ttgacaaggg tctgaagtt

<210> 846
<211> 945
<212> DNA
<213> Leishmania donovani ATCC 50212

<400> 846
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ctcgcagatc gggcttcccg cgctcgtagg gttcatcaac aaggtggaca tgacggacga 120
ggacacgtgc gacctgggtg acatggagct gcgcgagcag ctggagaaat acaagtttcc 180
ggcggaggag acgccaatcg tgcgcggctc agccctcaaa gccgtcgagg gcgatgcgaa 240
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gcgcaacaca gacaagcctt tccttatggc catcgagcac gtttacgaga tcggcaagga 360
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gacccggcgac acgaccagtc tatccaaggg caacgtggaa cgcggcatgg tgatggcgcc 600
gacgggtagc acgaacctgt acaacaaggt gaaggcgag gtgtacgtgc tgacgaagga 660
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tgctgacgtg acggcgggaca tgagcttccc ggaggcgag aagcaccgag aagagctcaa 780
caagaaattc ggccgcggcc ccgaggagga caagaagaaa gaggcagcga tgaaggagtt 840
cgagagcaag ctctgtctga tgccgggcga taaccgcgag ctgatectga cgctggcgta 900
cccgatgccc attgaaaagg gtctgaagtt caccatccgt gagggg 945

<210> 847
<211> 939
<212> DNA
<213> Leishmania infantum strain MOU

<400> 847
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atctgctcgc agatcgggct tccggcgctc gtaggggttca tcaacaaggt ggacatgacg 120
gacgaggaca cgtgcgacct ggtggacatg gagctgcgcg agcagctgga gaaatacaag 180
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aaggacaaga agagcgttgt cgtgaccggc cgcgtcgatc agggcgcttct gaagctcaac 420
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gcgccgacgg gtagcacgaa cctgtacaac aaggtgaagg cgcaggtgta cgtgctgacg 660
aaggatgagg gcgcccgcca cactggcttt agtctcact accgcccga gctcttcttc 720
cattgtgctg acgtgacggc ggacatgagc ttcccggagg cggagaagca ccgcaagag 780
ctcaacaaga aattcgcccg cggccccgag gaggacaaga agaaagaggc agcgatgaag 840
gagttcgaga gcaagctcgt ctgcatgccg ggcgataacc gcgagctgat cctgacgctg 900
gcgtacccca tgccattga aaagggtctg aagttcacc 939

<210> 848
<211> 933
<212> DNA
<213> Leishmania enriettii ATCC 50120

<400> 848
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gccggcgctt gtaggggttca tcaataaagt tgacatgacg gacgaggata cgtgcgacct 120
cgtggacatg gaggtgcggg aacagctgga gaagtacaag tttccggccg aggagacgcc 180
catcgtacgt ggctcggccc tcaaggccct cgagggggat gcgcaatacg aggggagtat 240
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gcctttcctc atggctatcg agcacgttta cgagctcggc aaagacaaga agagcgtcat 360
cgttaccggc cgcgtcgatc aaggtgtgct gaagctcaac acagacgccg agctggccgg 420
cttcagcgcc aagaaggcga cagtcaaagt gacgggcatc gagatgtatc acaagacact 480
caatgagtgc atgcccggcg actctgtcgg tgctcagcatc gtcgggtaccg gtgacacgac 540

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cagcttatcc aaggataatg ttgagcgcggt tatggtaatg gcggcaacgg gtagcacgaa 600
cctgtacaac aagctgaagg cgcaggttta cgtgctgaca aaggaggagg gtggccgcca 660
caccgggttc agccccact accgcccgca gctcttcttc cactgcgctg acgtgaccgc 720
agacatgagc ttcccggagg cggagaagta ccgcgaggag ctcaacaaga agttcggccg 780
tgcccttgag gaggacaaga agaaagaggc ggagatgaag gagttcgaaa gcaaacttgt 840
ctgcatgcca ggcgataacc gcgagctgat cctaactctg gcgtaccgca tgcccatcga 900
caagggcctg aagttcacca tccgtgaggg cgg 933

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<210> 849
 <211> 943
 <212> DNA
 <213> *Leishmania gerbilli* ATCC 50121

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<400> 849
cgggtggcatc attgtggtgg cggccaccga cggcgctcatg ccgcagacac gcgagcacct 60
cctgatctgc tcgcagattg ggcttccggc gctcgtaggg ttcatacaaa aagtggacat 120
gacggacgag gacacgtgcg acctggtgga catggagggt gcgcagcagc tggagaaata 180
caagtttccg gcggaggaga caccaatcgt gcgcggctcg gccctcaagg ccgtcgaggg 240
cgacgcgaag tacgaggaga acatcctcga actggtgcgg aagtgcgacg agtggatccc 300
cgacccgccc cgcaacacag acaagccttt ccttatggcc atcgagcagc tttacgagat 360
cggcaaggac aagaagagcg tcacgtgac cggccgcgctc gatcagggcg tgctgaagct 420
caacacggac gccgagctgg cgggcttcag cgccaagaag tcgacgggtg ggggtgacggg 480
cattgagatg taccacaaga cgctgagcga gtgcatgccc ggtgactccg tcggcgctcag 540
cattgtcggc accggcgaca cgaccagtct gtccaaggac aacgtggaac gcggcatggg 600
aatggcgggc acgggtagca cgaacctgta caacaagggt aaggcgagg tgtacgtgct 660
gacgaaggat gagggcgccc gccacactgg cttcagcccc cactaccgcc cgcagctctt 720
cttccattgc gctgacgtga cagcggacat gagcttcccc gagggcgaga agcaccgcga 780
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gaaggagtgc gagagcaagc tcgtctgcat gccggcgcat aaccgcgagc tgatcctgac 900
gctggcgctac ccgatgcccc ttgaaaaggg tctgaagttc acc 943

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<210> 850
 <211> 918
 <212> DNA
 <213> *Leishmania major* ATCC 50122

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<400> 850
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atctgctcgc aaattggcct tccggcgctc gttaggttca tcaacaaagt ggacatgacg 120
gacgaggaca cgtgtgacct ggtggacatg gaggtgcgcg agcagctgga gaaatacaag 180
tttccggcgg aggagacacc aatcgtgcgc ggctcggccc tcaaggccgt cgagggcgac 240
gcgaagtacg aggagaacat cctcgaactg gtgcggaagt ggcacgagtg gatccccgac 300
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aaggacaaga agagcgtcat cgtgaccggc cgcgtcgatc agggcgtgct gaagctcaac 420
acagacgccg agctggccgg cttcagcgcc aagaagtoga cgggtgaggg gacgggcatt 480
gaaatgtacc acaagacgct gagcgagtgc atgcccggtg tggagcgcgg catggtaatg 600
gtcggcaccg ggcacacgac cagtctgtcc aaggacaacg cgcaggtgta cgtgctgacg 660
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gagttcgaga gcaagctcgt ctgcatgccg ggcgataacc gcgagctgat cctgacgctg 918
gcgtaccgca tgcccatt

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<210> 851
 <211> 939
 <212> DNA
 <213> *Leishmania mexicana* ATCC 50156

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<400> 851
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cctgatctgc tcgcagattg ggcttccggc gctcgtaggg ttcatacaaa aagtggacat 120
gacggacgag gacacgtgcg acctggtgga catggagggt cgtgagcagc tggagaaata 180

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caagtttccg gcggaagaga cgcccatcgt ggcgggctcg gccctcaagg ccgtcgaggg 240
cgacgcgaag tacgaggaga acatcctcga actgggtgcgg aagtgcgacg aatggatccc 300
cgacccgccg cgcaacacag acaagccttt ccttatggcc attgagcacg tttacgagat 360
cggcaaggac aagaagagcg tcatcgtgac cggccgcgtc gatcagggcg tgctgaagct 420
caacacagac gccgagctgg ccggcttcag cgtcaagaag tcgacgggtga gggtagcggg 480
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cattgtcggc accggcgaca cgatcagtct ctccaaggac aacgttgaac gcggcatggt 600
aatggcggca acgggtagca cgaacctgta caacaagggt aaggcgagg tgtagctgct 660
gacgaaggat gaggggcgcc gccacactgg cttagcccc cactaccgcc cgcagctctt 720
cttcattgtg gctgacgtga cggcggacat gagcttccc gagggcgaga agcaccgcga 780
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gaaagagttc gagagcaagc tcgtctgcat gcggggcgac aaccgcgagc tgatcctgac 900
gctggcgtac ccgatgcccc ttgagaaggg tctgaagtt 939

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<210> 852
 <211> 912
 <212> DNA
 <213> *Leishmania tarentolae* strain MOU-2

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<400> 852
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gctcgcagat cgggctgccg gcgctcgtag ggttcatcaa caaagtggac atgacagacg 120
aagacacgtg cgacctggta gacctggagg tgctgtagca gctggagaag tacaagtttc 180
cggcagagga aacaccaatc gtgcgtggct cggccctcaa ggccgttgag ggcgatgcaa 240
agtacgagga gaacatcctc gaactgggtg ggaagtgcga cgagtggatc ccagaccgcg 300
cacgcaatac ggacaagcct ttccttatgg ccattgaaca cgtgtacgag atcggcaagg 360
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acgccgagct ggccggcttc agcgccaaga agtcgacggt gaaagtgcag ggcattgaga 480
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gcactggyga cacgaccagc ctctctaagg acaatgttga gcgtggcatg gtactggccg 600
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atgagggcgg ccgccacacc ggcttcagcc cccactaccg tccgcagctc ttcttccact 720
gcgctgacgt aacggcggac atgagcttcc cggaggcgga gaagcaccgc gaggaactca 780
ataagaaatt cggccgcggc cccgaggagg acaagaaaaa ggaggcggag atgaaggagt 840
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acccgatgcc ta 912

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<210> 853
 <211> 936
 <212> DNA
 <213> *Trypanosoma cruzi* strain MM3

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<400> 853
attcttgtgg tggcagctaa cgacggatgc atgccgcaga cgcgtgagca cctgcttatt 60
tgttcgcaga ttggccttcc tgctcttgta tgctttatca ataagtgtga catgatgcaa 120
gggcaggagg aatgatttga acttggttga atggaggtac gtgaactttt ggagaagtac 180
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<210> 854
 <211> 934
 <212> DNA

<213> Trypanosoma cruzi strain PCU-1

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<211> 937

<212> DNA

<213> Trypanosoma cruzi strain CGL-1

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<210> 856

<211> 888

<212> DNA

<213> Babesia bigemina strain Suarez-2

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<210> 857
 <211> 884
 <212> DNA
 <213> Babesia bovis strain Suarez-3

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<210> 858
 <211> 871
 <212> DNA
 <213> Babesia microtti strain Persing-1

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<210> 859
 <211> 1255
 <212> DNA
 <213> Leishmania guyanensis ATCC 50126

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<210> 860

<211> 1222

<212> DNA

<213> Leishmania mexicana ATCC 50156

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<210> 861

<211> 1246

<212> DNA

<213> Leishmania tropica ATCC 50129

<400> 861

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<210> 863
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<210> 864
 <211> 1350
 <212> DNA
 <213> *Trypanosoma brucei* strain LVH/75/USAMRU-K/18

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gagatgcacc acgagcagct cgctgaggcg acccccggtg acaacgtcgg ctttaacgtg 900
aagaacgttt ctgtaaagga catccgccgt ggcaacgtct gcggtaacac caagaacgac 960
cccccaaagg aggcgcgcga cttcacggca caggtgatca tcctgaacca ccccgacag 1020
attggaaacg gttatgcgcc cgtgctggac tgccacacat cgcacattgc ctgcaagttc 1080
gcggagatcg agtcgaagat cgaccgtcgc tctggcaagg agctggagaa ggctcccaag 1140
tcgatcaagt ctggcgacgc cgcgatcgtg cgcatgggtc cgagaagcc tatgtgcgtg 1200
gaggtcttca acgactacgc gccactcggc cgctttgccg tgcgtgacat gcgccagacc 1260
gtcgtgtgct gtatcatcaa ggccgtgacc aagaaggacg gttctggtgg taaggtgacg 1320
aaggctgcgg tgaaggcttc gaagaaataa

```

<210> 865

<211> 1052

<212> DNA

<213> *Cryptosporidium parvum*

<400> 865

```

aagctcaagg ctgagagaga aagaggtatt accatcgata ttgctttatg gcaattcgaa 60
accccaaaat accactacac tgtcattgat gccccagggtc acagagattt catcaagaat 120
atgattactg gtacctctca agctgatggt gctttattgg ttgtcccagc cgatcgtttc 180
gaaggtgcct tctccaagga aggtcaaacc agagaacatg ctttattggc cttcactttg 240
ggtgtcgacac aaatgattgt cggtattaac aagatggata cctgtgaata caagcaatct 300
cgtttttgatg aaatcttcaa cgaagttgat ggttacctca agaaggttgg ttacaacacc 360
gagaagatcc cattcgttgc catttctggt ttcgttgggtg ataatatggt tgagagatct 420
gacaagatgc catggtataa gggtaagacc ttagtcgaag cctcgcacac tatggaacca 480
ccaaagagac caactgacaa gccactccgt ctcccattac aagatgttta caagataggt 540
ggtgtaggta ctgtcccagt cggtcgtggt gaagctggta tcatcagacc aggtatgaat 600
gttaccttcg ctccagctgg tgttaccact gaagttaagt cagtagaaat gcaccatgag 660
cagatgccag aggcgcgtccc aggtgacaac gttggtttca atgttaagaa cgtctccatc 720
aaggatatca agagaggttt cgttgtctct gatgccaaaga atgaccagc taagggtctg 780
gaagacttca ctgctcaagt tctcgtcttc aaccaccag gtgaaatcaa gaacggttac 840
tctccagtcg ttgactgtca caccgctcac atttctctgca aattccagac tatcactgct 900
aagatggaca agagatctgg taaggttttg gaagaaaacc caaagcttat caagtctggt 960
gatgctgctt tgggtgttat gcaacctttg aagccacttt gtgttgaggc cttcactgac 1020
taccacctc taggtcgttt cgctgtccgt ga

```

<210> 866

<211> 837

<212> DNA

<213> *Staphylococcus saprophyticus* ATCC 35552

<400> 866

```

caatgaagtt ccagaaatta acaatgcctt agtcgtagac gttgaaagag atgaaggtac 60
agtatctctt acattagaag tggcattaca acttggcgat gatgtcgtac gtacaattgc 120
aatggattctt actgatggtg ttaaaccgtg tacagaagtt cgagatagcg gagatagcat 180
cagtgttcca gttggtgatg ctacgttagg acgtgtgttt aatgttcttg gtgatacaat 240
tgacttagac gagaagcttg atacttctgt caaacgtgat ccaattcata gagaagcacc 300
tgcattcgat caattatcaa caaaagttga aatcttagaa acaggtatta aagtaattga 360
tttacttgca ccatatatta aaggtggtaa aatcggttta ttcgggtggcg ctggtgtagg 420
taaaacagta ttaattcaag aattaattaa taatatagct caagaacatg gtgggtatttc 480
agtattttgcc ggcgtagggtg aacgtacgcg tgaaggtaat gacttatact acgaaatgag 540
tgatagtggg gttattaaga aaacagctat ggtcttcgga caaatgaatg agccacctgg 600

```

```

tgcgcgtatg cgtgttgctt tatcaggctt aacaatggct gaacacttcc gtgatgtaca 660
aggacaagat gttttactat ttattgataa catattcaga tttacgcaag ctgggttcaga 720
agtatcagca ctattaggct gtatgccatc agcgttggt tatcaacct cccttgctac 780
tgaaatgggt caattacaag aacgtattac atcaacaact aaaggatctg taacgtc 837

```

<210> 867
 <211> 818
 <212> DNA
 <213> Zoogloae ramigera ATCC 25935

```

<400> 867
aaggtattcg atgccttgaa aatggaaggc tccgagctga ccctggaagt acaacagcag 60
ctgggagacg gcattgtccg taccattgca ctgggtacct cgcacggcct gcgtcgcggc 120
atgatgatcc agaaccacgg caaacctatc atgggtgccg tcggtaaagc aaccctgggt 180
cgcacatcatg acgtgctggg taaccggatc gacgaatgcg gcgcgggtcg tcacgaccag 240
atcgcttcga tccaccgcgc tctcctctgc gtgtgcccgt tcgccaaggg cggtaaagtc 300
ctggaaaccg gcattaaagt tattgacctg gtgtgcccgt tcgccaaggg cggtaaagtc 360
ggctctgttcg gcgggtgcagg tgtgggcaag accgtgaaca tgatggaact gatcaacaac 420
atcgccaaag cacactcggg tctgtccgtg tttgcccgtg tgggtgagcg taccctgtaa 480
ggtaacgact tctaccacga gatggctgac gccaaagtgg tcgatctgga aaatccagag 540
aactccaagg ttgcgatggg ctacggctcag atgaatgaac caccaggcaa ccgtctgcgc 600
gtggcgctga ccgggtctgac catggctgaa gcattccgtg acgaaggcaa agacgttctg 660
ttcttcgtgg acaacatcta ccgcttcacc ctggccggta ccgaagtatc ggcactgctg 720
ggccgtatgc catcggctgt gggttaccag cctacgctgg ccgaagaaat gggtcgcctg 780
caagagcgca tcacttcgac caagaccggg tcgatcac

```

<210> 868
 <211> 778
 <212> DNA
 <213> Staphylococcus saprophyticus ATCC 43867

```

<400> 868
ctatcttagt agtatctgct gctgatggcc caatgccaca aactcgtgaa cacattcttt 60
tatcacgtaa cgttggtggt ccagcattag ttgtattctt aaacaaagtt gacatgggtg 120
acgatgaaga attattagaa ttagtagaaa tgggaagttc tgacttatta agcgaatatg 180
acttcccagg tgacgatgta cctgtaatct ctgggttctgc attaaaagct ttagaaggcg 240
acgctgacta tgagcaaaaa atcttagact taatgcaagc tggtgatgac ttcattccaa 300
caccagaacg tgattctgac aaaccattca tgatgccagt tgaggacgta ttctcaatca 360
ctggctcgtg tactgttgct acaggccgtg ttgaacgtgg tcaaatcaaa gtcgggtgaag 420
aatcgaaat catcgggtatg caagaagaat caagcaaaac aactgttact ggtgtagaaa 480
tggtccgtaa attattagac tacgctgaag ctggtgacaa cattggtgca ttattacgtg 540
gtgtttcacg tgatgacgta caacgtgggt aagtttttag tgctcctggg actattacac 600
cacatacaaa attcaaagcg gatgtttacg ttttatctaa agatgaagggt ggtcgtcata 660
caccattctt cactaactac cgcccacaat tctatttccg tactactgac gtaactggtg 720
ttgttaactt accagaaggt actgaaatgg ttatgcctgg cgataacgtt gaaatgga 778

```

<210> 869
 <211> 640
 <212> DNA
 <213> Enterococcus casseliflavus strain R689

```

<400> 869
tggctcctatg cctcaaacac gtgaacacat cttgttatca cgtaacgttg gtgtaccata 60
catcgttggt ttcttaaaca aaatggatat gggtgatgac gaagaattac tagaattagt 120
tgaaatggaa gttcgtgact tattgtcaga atatgacttc ccaggcgacg atgttctctg 180
aatcgttggt tctgctttga aagctcttga aggcgatgct tcatacgaag aaaaaatcat 240
ggaattaatg gctgcagttg acgaatacgt tccaactcca gaacgtgaca ctgacaaacc 300
attcatgatg ccagtcgaag acgtattctc aatcactgga cgtgggtactg ttgctacagg 360
ccgtgttgaa cgtggacaag ttgcgcttgg tgacgaagtt gaaatcggtg gtattgctga 420
agaaactgct aaaacaactg taactgggtg tgaaatgttc cgtaaatgtg tagactatgc 480
tgaagcaggg gataacattg gtgcattgct acgtgggtgt gctcgtgaag acatccaacg 540
tggacaagta ttggctaaag ctgggtacaat cacacctcat acaaaattta aagctgaagt 600
ttacgtttta acaaaagaag aaggtggacg tcacactcca

```

<210> 870
 <211> 644
 <212> DNA
 <213> Enterococcus casseliflavus strain R754

```
<400> 870
gtcctatgcc tcaaacacgt gaacacatct tggtatcacg taacgttggt gtaccataca 60
tcgttggtttt cttaaacaaa atggatatgg ttgatgacga agaattacta gaattagttg 120
aaatggaagt tcgtgactta ttgtcagaat atgacttccc aggcgacgat gttcctgtaa 180
tcgctgggttc tgctttgaaa gctcttgaag gcgatgcttc atacgaagaa aaaatcatgg 240
aattaatggc tgcagttgac gaatacgttc caactccaga acgtgacact gacaaacat 300
tcatgatgcc agtcgaagac gtattctcaa tcaactggac tggtagctgt gctacaggcc 360
gtgttgaacg tggacaagtt cgcgttggtg acgaagttga aatcgttggt attgctgaag 420
aaactgctaa aacaactgta actggtggtg aaatgttccg taaattgtta gactatgctg 480
aagcagggga taacattggt gcattgctac gtggtggtgc tcgtgaagac atccaacgtg 540
gacaagtatt ggctaaagct ggtacaatca cacctcatac aaaatttaaa gctgaagttt 600
acgttttaac aaaagaagaa ggtggacgtc acacaccatt cttc 644
```

<210> 871
 <211> 637
 <212> DNA
 <213> Enterococcus flavescens strain R758

```
<400> 871
tcctatgcct caaacacgtg aacacatctt gttatcacgt aacgttggtg taccatacat 60
cgttgttttc ttaaacaaaa tggatatggg ttgatgacga gaattactag aattagttga 120
aatggaagtt cgtgacttat tgtcagaata tgacttccca ggcgacgat ttcctgtaat 180
cgctgggttct gctttgaaag ctcttgaagg cgatgcttca tacgaagaaa aaatcatgga 240
attaatggct gcagttgacg aatacgttcc aactccagaa cgtgacactg acaaaccatt 300
catgatgcca gtcgaagacg tattctcaat cactggacgt ggtactgttg ctacaggccg 360
tggtgaacgt ggacaagttc gcggttggtg cgaagttgaa atcgttggtg ttgctgaaga 420
aactgctaaa acaactgtaa ctggtggtga aatgttccgt aaattgttag actatgctga 480
agcaggggat aacattggtg cattgctacg tggggttgct cgtgaagaca tccaacgtgg 540
acaagtatta gctaaagctg gtacaatcac cacctcatac aaatttaag ctgaagttta 600
cgtttttaaca aaagaagaag gtggacgtca cactcca 637
```

<210> 872
 <211> 643
 <212> DNA
 <213> Enterococcus gallinarum strain R631

```
<400> 872
gtcctatgcc tcaaactcgt gaacacatct tggtatcacg taacgttggc gtaccataca 60
tcgttggtttt cttgaacaaa atggatatgg ttgatgacga agaattgcta gaattagttg 120
aaatggaagt tcgtgacctt ttgtctgaat atgacttccc aggcgacgat gttcctgtaa 180
tcgccgggttc tgctttgaaa gctcttgaag gagatccttc atacgaagaa aaaatcatgg 240
aattgatggc tgcagttgac gaatacgttc caactccaga acgtgatact gacaaacat 300
tcatgatgcc agtcgaagac gtattctcaa tcaactggac tggtagctgt gctacaggcc 360
gtgttgaacg tggacaagtt cgcgttggtg atgaagtaga aatcgttggt attgctgacg 420
aaactgctaa aacaactgta acaggtggtg aaatgttccg taaattgtta gactatgctg 480
aagcagggga taacattggt gcattgctac gtggggttgc tcgtgaagac atccaacgtg 540
gacaagtatt ggctaaagct ggtacaatca cacctcatac aaaattcaaa gctgaagttt 600
atgttttgac aaaagaagaa ggtggacgtc acactccatt ctt 643
```

<210> 873
 <211> 641
 <212> DNA
 <213> Enterococcus gallinarum strain R691

```
<400> 873
gtcctatgcc tcaaactcgt gaacacatct tggtatcacg taacgttggc gtaccataca 60
tcgttggtttt cttgaacaaa atggatatgg ttgatgacga agaattgcta gaattagttg 120
```

```

aaatggaagt tcgtgacctt ttgtctgaat atgacttccc aggcgacgat gttcctgtaa 180
tcgccgggttc tgcttttgaag gctcttgaag gagatccttc atacgaagaa aaaatcatgg 240
aattgatggc tgcagttgac gaatacgttc caactccaga acgtgatact gacaaaccat 300
tcatgatgcc agtcgaagac gtattctcaa tcaactggacg tggtagctgtt gctacaggcc 360
gtgttgaacg tggacaagtt cgcgttggtg atgaagtaga aatcgttggt attgctgacg 420
aaactgctaa aacaactgta acaggtgttg aaatgttccg taaattgtta gactatgctg 480
aagcagggga taacattggt gcattgctac gtgggggttg tcgtgaagac atccaacgtg 540
gacaagtatt ggctaaagct ggtacaatca cactcctac aaaattcaaa gctgaagttt 600
atgttttgac aaaagaagaa ggtggacgtc acactccatt c 641

```

<210> 874

<211> 681

<212> DNA

<213> Staphylococcus haemolyticus strain LSPQ 2514

<400> 874

```

accagcatta gtagtattct taaataaagt tgacatgggt gacgatgaag aattattaga 60
attagttgaa atggaagtac gtgacttatt atctgaatac gacttcccag gtgacgatgt 120
acctgtaatc gctgggttcag cattaanaagc tttagaaggc gatgctcaat acgaagaaaa 180
aatcttagaa ttaatgcaag cagttgatga ctacattcca actccagaac gtgattctga 240
caaaccattc atgatgccag ttgaggacgt attctcaatc actggctcgtg gtactgttgc 300
tacaggccgt gttgaacgtg ggcaaatcaa agttggtgaa gaagttgaaa tcattgggtat 360
ccatgacact tctaaaacaa ctgttactgg ttagaaaatg ttccgtaaat tattagacta 420
cgctgaagct ggtgacaaca tcggtgcatt attacgtggt gttgctcgtg aagacgtaca 480
acgtggtcaa gtattagctg ctccaggttc aatcacacct cacacaaaat ttaaagcaga 540
cgtatacgtt ttatctaaag acgaaggtgg acgtcacact ccattcttca caaactatcg 600
tccacaattc tatttccgta ctactgacgt aactgggtgt gttaacttac cagaaggtac 660
tgaatgggtt atgcctggcg a 681

```

<210> 875

<211> 675

<212> DNA

<213> Staphylococcus epidermidis strain R591

<400> 875

```

attatcacgt aacgttggtg taccagcatt agttgtattc ttaaacaag ttgacatgggt 60
agacgacgaa gaattattag aattagttga aatggaagtt cgtgacttat taagcgaata 120
tgacttccca ggtgacgatg tacctgtaat cgtgggttct gcattaaaag cattagaagg 180
cgatgctgaa tacgaacaaa aaatcttaga cttaatgcaa gcagttgatg attacattcc 240
aactccagaa cgtgattctg acaaacatt catgatgcca gttgaggacg tattctcaat 300
cactggctgt ggtactgttg ctacaggccg tgttgaacgt ggtcaaatca aagttgggtga 360
agaagttgaa atcatcggtg tgacgaaac ttctaaaaca actgttactg gtgtagaat 420
gttccgtaaa ttattagact acgtggaagc tggtagaac atcggtgctt tattacgtgg 480
tggtgcacgt gaagacgtac aacgtgggtc agtattagct gctcctgggt ctattacacc 540
acacacaaaa ttcaaaagct aagtatacgt attatctaaa gatgaagggt gacgtcacac 600
tccattcttc actaactatc gccacaatt ctatttccgt actactgacg taactgggtg 660
tgtaaaactta ccaga 675

```

<210> 876

<211> 704

<212> DNA

<213> Staphylococcus epidermidis strain CSG 10

<400> 876

```

tcttattatc acgtaacgtt ggtgtaccag cattagttgt attcttaaac aaagttgaca 60
tggtagacga cgaagaatta ttagaattag ttgaaatgga agttcgtgac ttattaagcg 120
aatatgactt ccaggtgac gatgtacctg taatcgtgg ttctgcatta aaagcattag 180
aaggcgatgc tgaatacgaa caaaaaatct tagacttaat gcaagcagtt gatgattaca 240
ttccaactcc agaacgtgat tctgacaaac cattcatgat gccagttgag gacgtattct 300
caatcactgg tcgtgggtact gttgctaac gccgtgttga acgtgggtcaa atcaaagttg 360
gtgaagaagt tgaaatcatc ggtatgcacg aaacttctaa aacaactgtt actgggtgtag 420
aaatgttccg taaattatta gactacgtcg aagctgggtg caacatcggt gctttattac 480
gtgggtgttg acgtgaagac gtacaacgtg gtcaagttat agctgctcct ggttctatta 540

```

```
caccacacac aaaattcaaa gctgaagtat acgtattatc taaagatgaa ggtggacgtc 600
acactccatt cttcactaac tatcgccac aattctattt ccgtactact gacgtaactg 660
gtgttgtaaa cttaccagaa ggtacagaaa tggttatgcc tggc 704
```

<210> 877
 <211> 770
 <212> DNA
 <213> *Staphylococcus epidermidis* ATCC 35984

```
<400> 877
tcttagttgt atctgctgct gacgggtccaa tgccacaaac tcgtgaacac atcttattat 60
cacgtaacgt tgggtgacca gcattagttg tattcttaaa caaagttgac atggtagacg 120
acgaagaatt attagaatta gttgaaatgg aagttcgtga cttattaagc gaatatgact 180
tcccaggtga cgatgtacct gtaatcgctg gttctgcatt aaaagcatta gaaggcgatg 240
ctgaatacga acaaaaaatc ttagacttaa tgcaagcagt tgatgattac attccaactc 300
cagaacgtga ttctgacaaa ccattcatga tgccagttga ggacgtattc tcaatcactg 360
gtcgtggtac tggtgctaca ggccgtggtg aacgtggtca aatcaaagtt ggtgaagaag 420
ttgaaatcat cggtagtcac gaaacttcta aaacaactgt tactggtgta gaaatgttcc 480
gtaaattatt agactacgct gaagctggtg acaacatcgg tgctttatta cgtggtggtg 540
cacgtgaaga cgtacaacgt ggtcaagtat tagctgtccc tggttctatt acaccacaca 600
caaaattcaa agctgaagta tacgtattat ctaaagatga aggtggacgt cacactccat 660
tcttacttaa ctatcgccca caattctatt tccgtactac tgacgtaact ggtgttgtaa 720
acttaccaga aggtacagaa atgggttatgc ctggcgacaa cgttgaaatg 770
```

<210> 878
 <211> 716
 <212> DNA
 <213> *Staphylococcus epidermidis* ATCC 35983

```
<400> 878
ttgtattctt aaacaaaagt gacatggtag acgacgaaga attattagaa ttagttgaaa 60
tggaagttcg tgacttatta agcgaatatg acttcccagg tgacgatgta cctgtaatcg 120
ctggttctgc attaaaagca ttagaaggcg atgctgaata cgaacaaaaa atcttagact 180
taatgcaagc agttgatgat tacattccaa ctccagaacg tgattctgac aaaccattca 240
tgatgccagt tgaggacgta ttctcaatca ctggctcgtg tactgttgct acaggccgtg 300
ttgaacgtgg tcaaatcaaa gttggtgaag aagttgaaat catcggtatg cagcaaactt 360
ctaaaacaac tgttactggt gtagaaatgt tccgtaaatt attagactac gctgaagctg 420
gtgacaacat cgggtgcttta ttacgtggtg ttgcacgtga agacgtacaa cgtggtcaag 480
tattagctgc tcctggttct attacaccac acacaaaatt caaagctgaa gtatacgtat 540
tatctaaaga tgaaggtgga cgtcacactc cattcttcac taactatcgc ccacaattct 600
atctccgtac tactgacgta actggtggtg taaacttacc agaaggtaca gaaatggtta 660
tgcttgccga caacgttgaa atgacagttg aattaatcgc tccaatcgct atcgaa 716
```

<210> 879
 <211> 640
 <212> DNA
 <213> *Enterococcus gallinarum* strain R764

```
<400> 879
cggtcctatg cctcaaaact gtgaacacat cttgttatca cgtaacgttg gcgtaccata 60
catcgttggt ttcttgaaca aaatggatat ggttgatgac gaagaattgc tagaattagt 120
tgaaatggaa gttcgtgacc tattgtctga atatgacttc ccaggcgacg atgttcctgt 180
aatcgccggt tctgctttga aagctcttga aggagatcct tcatacgaag aaaaaatcat 240
ggaattgatg gctgcagtgt acgaatacgt tccaactcca gaacgtgata ctgacaaacc 300
attcatgatg ccagtcgaag acgtattctc aatcactgga cgtggtactg ttgctacagg 360
ccgtggtgaa cgtggacaag ttcgcgttgg tgatgaagta gaaatcgttg gtattgctga 420
cgaaaactgt aaaacaactg taacaggtgt tgaaatgttc cgtaaatgtg tagactatgc 480
tgaagcaggg gataacattg gtgcattgct acgtggggtt gctcgtgaag acatccaacg 540
tggaacaagta ttggctaaag ctggtacaat cacacctcat acaaaattca aagctgaagt 600
ttatgttttg acaaaaagag aaggtggacg tcacactcca 640
```

<210> 880

<211> 831
 <212> DNA
 <213> *Pseudomonas aeruginosa* strain PAO-1

```
<400> 880
cggcgcgatc ctggtttctg cggctgccga cggcccatg cgcagaccc gcgagcacat 60
cctgctgtcc cgccaggtag gcgttcccta catcgtcgtg ttcctgaaca aggccgacat 120
ggctcgacgac gccgagctgc tggaaactggt cgagatggaa gttcgcgac tgctgaacac 180
ctacgacttc ccgggcgacg acactccgat catcatcgtt tccgcgctga tggcgctgga 240
aggcaaggat gacaacggca tcggcgtaag cgccgtgcag aagctggtag agaccctgga 300
ctcctacatt ccggagccgg ttcgtgccat cgaccagccg ttcctgatgc cgatcgaaga 360
cgtgttctcg atctccggcc gcggtaccgt ggtaaccggt cgtgtagagc gcggcatcat 420
caagggtccag gaagaagtgg aaatcgctcg catcaaggcg accaccaaga ctacctgcac 480
cggcggttgaa atgttccgca agctgctcga cgaaggctcg gctgggtgaga acgttgggtat 540
cctgctgctg ggcaccaagc gtgaagacgt agagcgtggc caggttcttg ccaagccggg 600
caccatcaag ccgcacacca agttcgagtg cgaagtgtac gtgctgtcca aggaagaagg 660
tggtcgtcac accccgttct tcaagggtca ccgtccgcag ttctacttcc gtaccaccga 720
ygtgaccggt aactgcgaac tgccggaagg cgtagagatg gtaatgccgg gcgacaacat 780
caagatgggt gtcaccctga tcgctccgat cgccatggaa gatggcctgc g 831
```

<210> 881
 <211> 642
 <212> DNA
 <213> *Enterococcus casseliflavus* strain R421

```
<400> 881
cctatgcctc aaacacgtga acacatcttg ttatcacgta acgttggtgt accatacatc 60
gttggtttct taaacaaaat ggatatgggt gatgacgaag aattactaga attagttgaa 120
atggaagttc gtgacttatt gtcagaatat gacttcccag gcgacgatgt tcctgtaatc 180
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gcaggggata acattggtgc attgctacgt ggtgttgctc gtgaagacat ccaacgtgga 540
caagtattgg ctaaagctgg tacaatcaca cctcatacaa aatttaaagc tgaagtttac 600
gttttaacaa aagaagaagg tggacgtcac acaccattct tc 642
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<210> 882
 <211> 636
 <212> DNA
 <213> *Enterococcus casseliflavus* strain R775

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atggaagttc gtgacttatt gtcagaatat gacttcccag gcgacgatgt tcctgtaatc 180
gctggttctg ctttgaaagc tcttgaaggc gatgcttcat acgaagaaaa aatcatggaa 240
ttaatggctg cagttgacga atacgttcca actccagaac gtgacactga caaaccattc 300
atgatgccag tcgaagacgt attctcaatc actggacgtg gtactgttgc tacaggccgt 360
gttgaacgtg gacaagttcg cgttggtgac gaagttgaaa tcgttggtat tgctgaagaa 420
actgctaaaa caactgtaac tgggtgttgaa atgttccgta aattgttaga ctatgctgaa 480
gcaggggata acattggtgc attgctacgt ggtgttgctc gtgaagacat ccaacgtgga 540
caagtattgg ctaaagctgg tacaatcaca cctcatacaa aatttaaagc tgaagtttac 600
gttttaacaa aagaagaagg tggacgtcac acacca 636
```

<210> 883
 <211> 641
 <212> DNA
 <213> *Enterococcus faecalis* strain R422

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<400> 883
ggctctatgc ctcaaacacg tgaacatatc ttattatcac gtaacgttgg tgtaccatac 60
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```

atcgttgtat tcttaaaca aatggatatg gttgatgacg aagaattatt agaattagta 120
gaaatggaag ttcgtgactt attatcagaa tacgatttcc caggcgatga tgttccagtt 180
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gaattaatgg ctgcagttga cgaatatatc ccaactccag aacgtgatac tgacaaacca 300
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gaaacatcta aaacaactgt tacaggtgtt gaaatgttcc gtaaattatt agactacgct 480
gaagcaggcg acaacatcgg tgctttatta cgtggtgtag cacgtgaaga tatcgaacgt 540
ggacaagtat tagctaaacc agctacaatc actccacaca caaaattcaa agctgaagta 600
tacgtattat caaaagaaga aggcggacgt cacactccat t 641

```

<210> 884
 <211> 640
 <212> DNA
 <213> Enterococcus faecalis strain R575

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<400> 884
tatgcctcaa acacgtgaac atatcttatt atcacgtaac gttggtgtac catacatcgt 60
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ggaagttcgt gacttattat cagaatacga tttcccaggc gatgatgttc cagttatcgc 180
aggttctgct ttgaaagctt tagaaggcga cgagtcttat gaagaaaaaa tcttagaatt 240
aatggctgca gttgacgaat atatcccaac tccagaacgt gatactgaca aaccattcat 300
gatgccagtc gaagacgtat tctcaatcac tggacgtggt actggtgcta caggccgtgt 360
tgaacgtggt gaagttcgcg ttggtgacga agttgaaatc gttggtatta aagacgaaac 420
atctaaaaca actggttacag gtgttgaaat gttccgtaaa ttattagact acgctgaagc 480
aggcgacaac atcgggtgctt tattacgtgg tggtgcacgt gaagatatcg aacgtggaca 540
agtattagct aaaccagcta caatcactcc acacacaaaa ttcaaagctg aagtatacgt 600
attatcaaaa gaagaaggcg gacgtcacac tccattcttc 640

```

<210> 885
 <211> 632
 <212> DNA
 <213> Enterococcus faecium strain R492

```

<400> 885
tgccctcaaac tcgtgaacac atcctattgt ctcgtcaagt tgggtgttctt tacatcgttg 60
tattcttgaa caaagtagac atgggtgatg acgaagaatt actagaatta gttgaaatgg 120
aagttcgtga cctattaaca gaatacgaat tccctgggtga cgatgttctt gtagttgctg 180
gatcagcttt gaaagctcta gaaggcgacg cttcatacga agaaaaaatt cttgaattaa 240
tggctgcagt tgacgaatac atcccaactc cagaacgtga caacgacaaa ccattcatga 300
tgccagttga agacgtgttc tcaattactg gacgtggtac tgttgctaca ggtcgtggtg 360
aacgtggaca agttcgcgtt ggtgacgaag ttgaagttgt tggatttgct gaagaaactt 420
caaaaacaac agttactggt gttgaaatgt tccgtaaat gttagactac gctgaagctg 480
gagacaacat tgggtgcttta ctacgtggtg ttgcacgtga agacatocaa cgtggacaag 540
tttttagctaa accaggtaca atcacacctc atacaaaatt ctctgcagaa gtatacgtgt 600
tgacaaaaga agaaggtgga cgtcatactc ca 632

```

<210> 886
 <211> 640
 <212> DNA
 <213> Enterococcus faecium strain R576

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catcggttga ttcttgaaca aagtagacat ggttgatgac gaagaattac tagaattagt 120
tgaaatggaa gttcgtgacc tattaacaga atacgaattc cctggtgacg atgttcctgt 180
agttgctgga tcagctttga aagctctaga aggcgacgct tcatacgaag aaaaaattct 240
tgaattaatg gctgcagttg acgaatacat cccaactcca gaacgtgaca acgacaaacc 300
attcatgatg ccagttgaag acgtgttctc aattactgga cgtggtactg ttgctacagg 360
tcgtgttgaa cgtggacaag ttcgcgttgg tgacgaagtt gaagttggtg gtattgctga 420
agaaaactta aaaacaacag ttactggtgt tgaaatgttc cgtaaattgt tagactacgc 480
tgaagctgga gacaacattg gtgctttact acgtggtgtt gcacgtgaag acatccaacg 540
tggacaagtt ttagctaaac caggtacaat cacacctcat acaaaattct ctgcagaagt 600

```

atacgtgttg acaaaagaag aaggtggacg tcataactcca

640

<210> 887
<211> 806
<212> DNA
<213> Zoogloae ramigera ATCC 25935

<400> 887
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gcccgcgaag ttggcggtcc atacatcatc gtgttcctga acaagtgcga cctgggtgac 120
gacgcagaac tgctggaact ggtcgaaatg gaagtgcgtg aattgctgtc gaaatacag 180
ttcccaggcg acgacgtacc aatcatcaag gggtcggcac gtatggcgct ggaaggcaaa 240
gaaggcgaga tgggcgttga cgccatcatg cgtctggccg atgcaactgga cagctacatc 300
cctacgccag agcgcgcagt cgatggcgcc ttcctgatgc cagtgggaaga cgtgttctcg 360
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gaagagatcg aaatcgtcgg cattatcgac accgtcaaaa ccacttgac cggcggtgga 480
atgttccgca agctgctgga ccagggtcaa gccggcgaca acgttgggtc gctgctgcgc 540
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accccgttct tcaacaacta tcgtccacag ttctacttcc gtacgactga cgtgaccggt 720
tcgatcgaac tgccagcaga caaagaaatg gtcatgccag gcgacaacgt gtcgatcacc 780
gtcaagctga tcaaccgat cgcat 806

<210> 888
<211> 634
<212> DNA
<213> Enterococcus faecalis strain R503

<400> 888
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tgtattctta aacaaaatgg atatggttga tgacgaagaa ttattagaat tagtagaat 120
ggaagtctgt gacttattat cagaatacga tttcccaggc gatgatgttc cagttatcgc 180
aggttctgct ttgaaagctt tagaaggcga cgagtcttat gaagaaaaaa tcttagaatt 240
aatggctgca gttgacgaat atatcccaac tccagaacgt gatactgaca aaccattcat 300
gatgccagtc gaagacgtat tctcaatcac tggacgtggt actggtgcta caggccgtgt 360
tgaacgtggt gaagttcgcg ttggtgacga agttgaaatc gttggtatta aagacgaaac 420
atctaaaaca actgttacag gtgttgaaat gttccgtaaa ttattagact acgctgaagc 480
aggcgacaac atcgggtgctt tattacgtgg tgtagcacgt gaagatatcg aacgtggaca 540
agtattagct aaaccagcta caatcactcc acacacaaaa ttcaaagctg aagtatacgt 600
attatcaaaa gaagaaggcg gacgtcacac tcca 634

<210> 889
<211> 493
<212> DNA
<213> Aspergillus fumigatus ATCC 14110

<400> 889
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cttttacta acgcaaacca tgtagaacaa cattgccaag gccacgggtg gttactccgt 120
cttactggt gttggtgagc gtactcgtga gggtaacgat ctgtaccacg aaatgcagga 180
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cgagcccccc ggtgcccgtg cccgtgtcgc ccttaccggt ctgaccattg ccgagtactt 300
ccgtgacgag gaggttcagg acgtgctgct cttcattgac aacattttcc gtttcacca 360
ggccggttct gaggtgtctg cccttctcgg tcgtatcccc tctgcccgtc gttaccagcc 420
caccctggcc gtcgacatgg gtggtatgca ggagcgtatc accaccacca agaagggttc 480
tattacctcc gtc 493

<210> 890
<211> 466
<212> DNA
<213> Penicillium marneffeii ATCC 64101

<400> 890
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 caacattgcc aaggtcacg gtggttactc tgtcttactc ggtgtcgggtg aacgtactcg 120
 tgagggtaac gatttgtacc acgaaatgca ggaaactggg gtcattcagc tcgagggtga 180
 atccaaggtc gccctcgtgt tcggtcagat gaacgagccc cccggtgccc gtgcccgtgt 240
 cgctcttact ggtttgacca ttgccgagta cttccgtgac gaggaagggtc aggacgtgct 300
 tctcttcatt gacaacattt tccgtttcac tcaggccggg tctgagggtg ctgcccttct 360
 gggtcgtatc ccctctgccc tcggttacca gccacacctt gccgtcgaca tgggtatcat 420
 gcaggagcgt attaccacca ccaccaaggg ttccatcacc tccgtc 466

<210> 891
 <211> 478
 <212> DNA
 <213> *Paecilomyces lilacinus* ATCC 42570

<400> 891
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 gtgagcgtac ccgtgagggt aacgatctgt accacgaaat gcaggagacc tcggtcattc 120
 agctcgaggg cgagtctaag gtggccctgg tctttgggtca gatgaacgag ccccggggtg 180
 ctctgccccg tgctcgtctt actggtctta ccgtcgccga gtacttccgt gaccaggagg 240
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 gtgtctgccc tgctgggtcg tatccccctt gccgtcggtt accagcccac cctcgccgtc 420
 gacatgggtg gcatgcagga gcgtatcacc accaccaaga agggctctat cacctccg 478

<210> 892
 <211> 481
 <212> DNA
 <213> *Penicillium marneffeii* ATCC 58950

<400> 892
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 aacgaaagcg tagaacaaca ttgccaaaggc tcacgggtgg tactctgtct tcactgggtg 120
 cgggtgaacgt actcgtgagg gtaacgattt gtaccacgaa atgcaggaaa ctgggtgtcat 180
 tcagctcgag ggtgaatcca aggtcgccct cgtgttcggg cagatgaacg agccccccg 240
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 cgacatgggt atcatgcagg agcgtattac caccaccacc aagggttcca tcacctccgt 480
 c 481

<210> 893
 <211> 1208
 <212> DNA
 <213> *Sporothrix schenckii* ATCC 14285

<400> 893
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 ggtaccctcg gtcgcatcat gaacgtcacc ggtgacccga tcgacgagcg cgggtcccatc 120
 aagaccgaca agttccgtcc catccacgct gaggtctccg agttcgttga ccagtcgacc 180
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 cgtacccgtg agggtaacga tctgtaccac gaaatgcagg agacctctgt cattagctt 420
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 gcccggtgctg ccttgaccgg tttgactgtc gctgagtact tccgtgacga ggagggccag 540
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<210> 894
<211> 534
<212> DNA
<213> *Malbranchea filamentosa* ATCC 48174

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gccttgcttg gacgtattcc ctctgccgtc ggttaccagc ccactctcgc cgtcgacatg 480
ggtggtatgc aggaacgtat cacaaccacc aacaagggtt ccattacttc cgtg 534

<210> 895
<211> 448
<212> DNA
<213> *Paecilomyces lilacinus* ATCC 60735

<400> 895
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gtatcaccac caccaagaag ggctctat 448

<210> 896
<211> 483
<212> DNA
<213> *Aspergillus niger* ATCC 9508

<400> 896
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gtgtcgggtga gcgtactcgt gagggtaacg atctgtacca cgaaatgcag gagactggtg 180
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ccgtcgacat ggtggtatg caggagcgta ttaccaccac caccaagggt tccattacct 480
ccg 483

<210> 897
<211> 1124
<212> DNA
<213> *Aspergillus fumigatus* ATCC 14110

<400> 897
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actcccaagt atgaggtcac tgtcatcggt aagctcgact cgccccgata tgttttgggt 120
ctgtagctaa cacgatctga agatgcccc ggtcaccgtg acttcatcaa gaacatgatc 180

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actggtacct cccaggctga ctgcgctatc ctcattcattg cctccggtag tggtaggttc 240
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tctgttgaga acaaccccaa gtcatcaag tccggtgatg ccgccatcgt gaagatggtt 1080
ccttccaagc ccatgtgtgt cgagtccttc actgactacc cccc 1124

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<210> 898
 <211> 1363
 <212> DNA
 <213> *Penicillium marneffeii* strain WSA-214

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<400> 898
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atcactggta cctcccaggc cgattgcgct attctcatca ttgcctctgg tactgggtgaa 180
ttcgaggctg gtatctccaa ggatggccag actcgtgagc acgctctttt ggctttcacc 240
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caacgaaatt gtcaaggaga ctccaactt catcaagaag gtcggataca accctaagaa 420
cgttcctttc gttcctatct ccggtttcaa cgttgacaac atgcttgagc cctcccccaa 480
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ccaagcccat gtgtgttgag gtttccaccg gttaccctcc tctcgggtcgt ttcgcccgtt 1320
gcgagtaagt tttatctccg ttgtctatct tccatccttc ccttctcctc cgtcttccat 1363
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<210> 899
 <211> 1147
 <212> DNA
 <213> *Piedraia hortai* ATCC 24292

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<400> 899
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gactcccaag tactatgtca ccgtcattgg tacgtcgcac tatctcactc ctacacagaag 120
cacgctccta acatcacaca gacgctcccc gtcaccgtga tttcatcaag aacatgatca 180
ctggtagctc ccaggccgac tgcgctatcc tcattatcgc tgccggtact ggtgagttcg 240
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tccgtcttcc tctccaggat gtttacaaga tcggtggtat cggaactggt cctgtcggcc 660

```

```

gtatcgagac tgggtgtcctc aagccccgga tgggtcgttac cttcgtctccc gccaacgtca 720
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acaacgtcgg tttcaacgtg aagaacgttt ccgtcaagga catccgccgt ggtaacgttg 840
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cccacattgc ttgcaagttc tccgagatca aggagaagat cgaccgccgt accggcaagt 1020
ctgttgagga cgcccccaag ttcacatcaag ctggtgactc tgccatcgtc aagatgggtc 1080
cctccaagcc catgtgcgtt gaggctttca ccgactacce tcctctgggc cgttttcgccg 1140
tccgtga                                     1147

```

<210> 900
 <211> 1150
 <212> DNA
 <213> *Paecilomyces lilacinus* ATCC 60735

```

<400> 900
ctcaaggccg agcgtgagcg tggatatcacc atcgacattg ccctctggaa gttcgagact 60
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acgtcgctaa cgtgcttgaa cagacgctcc cggccaccgt gacttcatca agaacatgat 180
cactgggtacc tcccaggctg actgcgctat cctcattatc gctgcccggca ctgggtgagtt 240
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cgggtgttaag cagctcatcg tcgctatcaa caagatggac accaccaagt ggtctgaggc 360
ccgtttccag gagatcatca aggagacctc caacttcatc aagaaggctg gctacaacct 420
caagaccgtc gctttcgtcc ccatctctgg tttccacggc gacaacatgc tttcccctc 480
caccaactgc ccctgggtaca agggctggga gaaggagacc aaggctggca agtccaccgg 540
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cctcgcgctt ccccttcagg atgtgtacaa gatcgccggg atcggcacag tccctgtcgg 660
ccgtatcgag actgggtgtca tcaagcccg catggtcgtg accttcgctc cttccaacgt 720
caccaccgaa gtcaagtccg ttgagatgca ccacgagcag ctctccgagg gtgtcccgg 780
tgacaacgtc ggcttcaacg tcaagaacgt ctccgtcaag gagatccgtc gtggcaacgt 840
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cgccacatt gcctgcaagt tcgcccagat caaggagaag atcgaccgcc gtaccggcaa 1020
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tccctccaag cccatgtgcg ttgaggcttt caccgactac cctcctctgg gccgcttcgc 1140
cgtccgtgac                                     1150

```

<210> 901
 <211> 751
 <212> DNA
 <213> *Paracoccidioides brasiliensis* ATCC 32075

```

<400> 901
taccactaag tgggtccgaga cccgattcaa tgaaattatc aaggaagtca ccaatttcat 60
taagaaggtc ggatataacc ccaagactgt tcctttcgtt cccattttctg gtttcgaggg 120
tgacaacatg atcgagccct ctgccaaactg cccatgggtac aagggtggtt ccaaggagac 180
tgctcagggc aagtactctg gcaagaccct tcttgaggcc atcgacgcca ttgagcccc 240
caccgcgtct accgataaac ctctccgtct tcccctccag gatgtctaca agatctccgg 300
tattggcact gttcctgtcg gacgtgttga gactggagtc atcaagcccgt gtatgggtcgt 360
gaccttcgct cccgccaacg tcaccactga agtcaagtcc gtcgaaatgc accaccagca 420
gcttaccgcc ggtaaccccgt gtgacaacgt cggttcaac gtcaagaatg tttccgtcaa 480
agaagtccgc cgtggtaacg ttgccgggtg ctctaagaat gatcccccaa agggctgcga 540
ttccttcaat gccaggttca tcgtcctcaa ccaccctggt caggttggcg ctggttatgc 600
cccagtcctc gactgccata ctgcccacat tgcttgcaaa ttcgtgagc tctttgagaa 660
gattgatcga cgaaccggaa agtctgttga gaacaacccc aagttcatca agtccgggtg 720
tgctgctatc gtcaagatga ttccttccaa g                                     751

```

<210> 902
 <211> 1056
 <212> DNA
 <213> *Sporothrix schenckii* ATCC 7968

<400> 902

```

cgtgagcgcg gtatcaccat cgatattgct ctgtggaagt tcgagacccc caagtactac 60
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tcgagggccg actgcgccat tctcatcatt gccgctggta ctgggtgagtt cgaggctggg 180
atctccaagg atggccagac tcgtgagcac gctctgctcg cctacaccct ggggtgtgcgg 240
cagctgatcg tcgccatcaa caagatggac acggccaagt gggctgaggc tcgttaccag 300
gagatcatca aggagacctc caacttcac aagaaggctg gctacaaccc caagactgtt 360
gccttcgtcc ccatctcggg cttccacggc gacaacatgc ttactccctc gaccaactgc 420
ccctgggtaca agggctggga gaaggagggc aagagcgcca aggttaccgg taagactctg 480
ctggacgcca ttgacgcctg cgagccccc aagcgcccca cggacaagcc cctgcgtctg 540
cccctccagg atgtctacaa gatcgccggt atcggcactg tccctgtcgg ccgtatcgag 600
actgggtgtcc tgaagcccg catggtcgtc acctttgccc cgtccaacgt caccactgaa 660
gtcaagtccg tcgagatgca ccacgagcag ctgttgagg gtgttcccgg cgacaacgtc 720
ggcttcaacg tcaagaacgt ctccgtcaag gagatccgtc gtggcaacgt tgccggtgac 780
tccaagaacg accccccctc gggcgcggcc accttcaacg ccagggtcat tgtcctgaac 840
caccgcggcc aggtcggcaa cggctacgcc ccggttctgg actgccacac cgcccacatt 900
gcctgcaagt tcaccgagat ccttgagaag atcgaccgcc gtaccggcaa gtcgggtgag 960
aacaaccca agttcatcaa gtcgggtgac gccgccattg tcaagctgac gccctcgaag 1020
cccatgtgcg ttgaggcctt cactgactac cccctt 1056

```

<210> 903
 <211> 1366
 <212> DNA
 <213> *Penicillium marneffei* ATCC 58950

```

<400> 903
caaggctgag cgtgagcggtg gtatcaccat cgatattgct ctctggaagt tccagactgc 60
caagtacgag gttaccgtca ttgacgcccc cgggtcacctg gatttcatca agaacadatgat 120
cactgggtacc tccaggcccg attgcgctat tctcatcatt gccctctggta ctgggtgaatt 180
cgaggctggg atctccaagg atggccagac tcgtgagcac gctcttttgg ctttaccct 240
cgggtgtccgt cagctcattg ttgccctcaa caagatggac acttgcaagt ggtctcaggg 300
tgagtactcg tacctgcgtt tggccttgaa tatcttacta atgcaccata gatcggtaca 360
acgaaattgt caaggagact tccaacttca tcaagaaggc cggatacaac cctaagaacg 420
ttcctttcgt tcctatctcc ggtttcaacg gtgacaacat gcttgagccc tcccccaact 480
gcccctggta caagggttgg gagaaggaga ccaaggccgg taaggctcact ggtaagaccc 540
tcctcgaggc catcgacgcc attgagcccc ctaccgtcc cgccaacaag gttagtccct 600
cctcgactac tcaaaccctc ctcataagtt cagattactg actcgttcac agcccctccg 660
tcttccccctc caggatgtct acaagatcgg ttgtattgga acggttcccg tcggtcgtgt 720
tgagactggg accatcgctt ctggtatggt tgtcaccttg taagtactc tcctcgctta 780
tcctacctga aatcatcatg tgctaacttg acactcagcg ctcccggcaa cgtcaccact 840
gaagtcaaga gtgttgaaat gcaccaccag cagctcactg ccggtcagcc cggtgacaac 900
gttgggtttca acgtgaagaa cgtctccgtc aaggaaatcc gtcgtggtaa cgttgctggt 960
gacagcaaga acgaccccc tgccgggtgt gcctccttca acgcccaggc catcgctctc 1020
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attgcttgca agttcgctga gtcctcagc caagttgacc tgcgtaccgg aaagtctggt 1140
gaggaccacc ccaagttcat caagtccgg gagcgtgcca tcgtcaagat gattccttcc 1200
aagcccatgt gtgttgaggc ttaccacgag taccctctc tcggtcgttt cgccgttcgc 1260
gagtaagttt tatctccgtt gtctatcttc catccttccc ttctcctccg tcttccatat 1320
atattttttc agttatatgt gactaaccac aatcacggg aatagc 1366

```

<210> 904
 <211> 841
 <212> DNA
 <213> *Curvularia lunata* ATCC 26425

```

<400> 904
ctattatcgt tgttgccgct tccgacggtc aaatgcccc gactcgtgag catctgctgc 60
tcgcccggca ggtcgggtgtc cagaagatcg ttgtcttctg caacaagggtc gatgctgtg 120
aggacaagga gatgttgagg ctctcgcaga tggagatgcy cgaattgctc agcagctacg 180
gcttcgaggg cgacgagact cccatcatca tgggatctgc cctctgcgcc attgagggcc 240
gcgaacctga gattggtgtc aaccgaattg atgagctgct cgaggccggt gatacttgg 300
tccccacccc tcagcgtgag accgacaagc ctcttctcat ggccgtcgag gatgtcttct 360
ccattgctgg tcgtggcact gtcgtctctg gccgtgtcga gcgaggtatc ctgaagcgcg 420
atgctgaagt tcgagctcgt ggcaagggca ccgcccccat caagaccaag gttaccgata 480
tcgagacctt caagaagtcc tgcgaggagt ctccgcgtgg tgacaactcc ggtctccttc 540

```

```

ttcgtggtgt caagcgtgat gaagtccgcc gtggtatggt cgtttccgtc cctggacagg 600
tcaaggcgca caagaagttc cttgtctcca tgtacgtgtt gagcaaggag gaaggagggtc 660
gtcacactgg cttcgggtgag aactacaggc cgcaaagtgt catccgcaact gccgacgagt 720
cgtgtgccct gtactggcca gaaggcaccg agggacgcca tgacaagctt gttatgccc 780
gtgacaacgt cgagatgggt tgcgagctcc atgcaccaca cgtcttgagg cctgggtcaac 840
g

```

<210> 905
 <211> 967
 <212> DNA
 <213> *Aspergillus niger* ATCC 9508

```

<400> 905
cgggtgctatc attgtcgtcg ccgcctccga cgggtcagatg tacgttaacc ttaaaagaat 60
aactctcctt cagtatatat gcttacactg gcgatcaaca ggcccagac tcgtgagcac 120
ttgctgcttg ctcgtcagggt cgggtgtccag aagatcggtt tcttcgtcaa caagggtcgat 180
gctatcgatg accccgagat gctggagctc gttgagctgg aaatgcgcga gcttctcagc 240
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gttttctcca tccccggctg tggtagccgt gcctccggcc gtgtcgagcg tgggtctcctg 480
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ggcagcgcca aggccaaacag caagttcatg gtctccatgt acgtcctgac cgaggctgar 720
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ggtaagtaaaa attgcattct attccgctac tagggaacca tctctaattc tatttgctac 840
agatgaggct gctgagttca gcttccccga cggagaccag tcccgccgta tcatgcccgg 900
tgacaacgtc gagatgatcg tcaagaccca ccgcccgtc gccgccgagg ccggtcagcg 960
cttcaac

```

<210> 906
 <211> 852
 <212> DNA
 <213> *Bipolaris hawaiiensis* ATCC 26067

```

<400> 906
tgggtgctatt attgttgttg ccgcttccga cgggtcaaagt cccagactc gtgagcatct 60
gctgctcgcc cgtcagggtcg gtgttcagaa gatcgttgtc ttcgttaaca aggtcgacgc 120
tgtcgaggac aaggagatgt tggagcttgt cgagatggag atgcgcgaac tgctcagcag 180
ctatggcttc gagggcgacg agacccctat catcatgggt tctgctctct gcgccattga 240
aggccgtcaa cccgacattg gtgtcgaacg aattgacgag ctgctcgagg ctggtgatac 300
ttggattccc acccctcagc gtgagaccga aaagcctttc ctcatggccg tcgaggatgt 360
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gcgcgatgct gaagttgagc ttgtgggcaa gggcagcgca cccatcaaga ccaaggttac 480
cgatatcgag accttcaaga agtcttgcca ggagtcccgc gctgggtgaca actccggtct 540
cctctctcgt ggtgttaagc gtgatgaagt ccgcctgggt atgggtcgtt ccgtccctgg 600
acagggttaag gcgcacaaga agttccttgt ctccatgtat gtgctgagca aggaggaagg 660
tggccgacac actggcttcg gtgagaacta caggccgcaa atgttcatcc gcaactgccga 720
cgagtcgtgt gccctgtact ggccagaagg caccgaggat gcccacgaca agcttgtcat 780
gcccgggtgac aacgtcgaga tgggttgcga gctccatgca ccacacgtct tggagactgg 840
tcagcgcttc aa
852

```

<210> 907
 <211> 966
 <212> DNA
 <213> *Aspergillus flavus* ATCC 26947

```

<400> 907
ggtgctattt ttgtcggttg tgcttcggat ggtcatgatg tatggacagg ccctttgcta 60
ctgaatgggt tcaagatctc gcgcttacac gtattataat agggcccaga cccggggagca 120
cttgetgctt gcccgtcagg tcggtgtcca gaagatcgct gtttttgtca acaagattga 180
tgccgttgag gaccctgaga tgttggagct tgtcgagttg gaaatgcgcg agctccttag 240

```



```

cagctacggc ttcgagggcg aagagactcc catcatcttc ggttctgctc tgtgtgcttt 300
ggaggaccgt cgccccgaca ttggtgccga gcgtatcgac gagctcatga aggccgttga 360
cacctggatc cctacccctc agcgtgatct tgacaagcct ttccctcatgt ctgtcgagga 420
agtcttctcc atcgccggtc gtggtaccgt tgccctccggc cgtgtcgaac gtggtatcct 480
gaagaaggac agcgaagtcg agatcatcgg aggtagcttc gatgctacca agaccaaggt 540
caccgacatt gagaccttca agaagtcttg tgacgagtcc cgcgctgggtg acaactctgg 600
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tggcagcacc aaggccacg accagttctt ggtgtccatg tacgttctca ctgaggctga 720
gggtggctgt cgtactggct tcggctccaa ctaccgcccc cagggtgttcg ttcgactgc 780
tggtaagtca agccttttgc tcaactaacg gtattgatta agttctaact gttgtatcct 840
agatgaggct gctgacctca gcttccccga cgggtgatgag tcccggaggg tgatgcctgg 900
tgacaacgtc gagatgggtcc tcaagactca ccgccccatt gctgctgagg ctggccagcg 960
cttcaa

```

<210> 908
 <211> 845
 <212> DNA
 <213> *Alternaria alternata* ATCC 62099

```

<400> 908
ggtgctatca tcgtcgttgc tgcttccgat ggtcagatgc cccagacccg tgagcacttg 60
ctgctcgccc gtcaggtcgg tttcagaag atcgttgtct tcgtcaacaa ggtcgtatgct 120
gtcgaagacc cggagatgtt ggaactcgtc gagatggaga tgcgtgagtt actcaccagc 180
tacggcttcg agggcgacga gacacccatc atcatgggtt ccgctctatg cgccatcgag 240
ggccgccagc ccgagatcgg tgttaccag gtcgacgagc taatggacgc tgtcgactca 300
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cgtgacgctg aagtcgagct tgcggcaag ggcaccgcgc caatcaagac caaggtcact 480
gatattgaga ccttcaagaa gtcgtgcgag gagtgcgcgc cgggtgataa ctccggctct 540
ctcctccgtg gtgtcaagcg tgatgacgtt cgccgcggta tgggtgtttc cgttcccggg 600
caagtcaagg ctcaacaaga gttccttgct tccatgtacg ttctaagcaa agaggagggt 660
ggtcgtcaca ccggtctcgg cgagaactac aggccgcaaa tgttcatccg aactgcccgt 720
gaatcctgcg cacttcactt cccagagggg accgaggatg cgcacgacaa gctagttatg 780
cccggtgaca acgtcgagat ggtctgcgaa ctccaccagc cccacgttct agagaccggt 840
cagcg

```

<210> 909
 <211> 931
 <212> DNA
 <213> *Penicillium marneffe* ATCC 64101

```

<400> 909
cgctgttggt gtcgtcgtg cttctgatgg tcaaagttaa catatccacg agctgccaat 60
tatggacact gctgataaga ataggcccca aaccgtgag cacttgctcc tcgcccgtca 120
ggtcgggtgtt caaaagatcg tcgtcttcgt caacaagggt gatgccgtcg aggacccga 180
gatgttgga cttgtcgaat tggaaatgcg tgaactcttg accacctacg gtttcgaggg 240
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gattggcgaa cagaagattg acgagctcat gaacgcggtt gatacctgga tccccacccc 360
ccagcgtgac cttgacaagc ccttcttgat gtccgttgag gaagttttct ccattctctg 420
tcgtggtacc gttgcatctg gtcgtgttga gcgtggtatt ttgcgcaagg attctgaggt 480
tgagattatc ggataccaga agaaccctat caagaccaag gttaccgaca ttgagacctt 540
caagaagtct tgcgatgaat ctcgtgctgg tgacaactct ggcttgcttc tccgtgggtat 600
caagcgtgag gacattcgtc gtggtatggg tategctgct cctggaacca ccaaggctca 660
tgacaacttc ttggtctcca tgtatgtctt gactgaggct gaaggtgggt gtcgtactgg 720
attcggcgcc aactaccgtc ctcaagcttt catccgtact gccggtatgt tccctttcaa 780
agtcaattaa tgagcgattt gctaacgagt tatagatgag gctgctactc tcagcttccc 840
cgggtgacgat cagtccaagc aggtcatgcc cggtgacaac gttgagatga tcttgaagac 900
acaccgtccc gttgccgcgc aagctgggtca g

```

<210> 910
 <211> 931
 <212> DNA
 <213> *Penicillium marneffe* ATCC 58950

```

<400> 910
cgctgttggt gtcgtcgtcg cttctgatgg tcaaatgtaa catatccacg agctgccaat 60
tatggacact gctgataaga ataggcccca aaccctgag cacttgctcc tcgcccgtca 120
ggtcggtggt caaaagatcg tcgtcttcgt caacaagggt gatgccgtcg aggaccccga 180
gatgttgga cttgtcgaat tggaaatgcg tgaactcttg accacctacg gtttcgaggg 240
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gattggcgaa cagaagattg acgagctcat gaacgccgtt gatacctgga tccccacccc 360
ccagcgtgac cttgacaagc ccttcttgat gtccgttgag gaagttttct ccattctctg 420
tcgtgggtacc gttgcatctg gtcgtgttga gcgtgggtatt ttgcgcaagg attctgaggt 480
tgagattatc ggataaccaga agaaccctat caagaccaag gttaccgaca ttgagacctt 540
caagaagtct tgcgatgaat ctcgtgctgg tgacaactct ggcttgcttc tccgtgggtat 600
caagcgtgag gacattcgtc gtggtatggt tatcgtgct cctggaacca ccaaggctca 660
tgacaacttc ttggtctcca tgtatgtctt gactgagggt gaagggtggtc gtcgtactgg 720
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agtcaattaa tgagcgattt gctaacgagt tatagatgag gctgctactc tcagcttccc 840
cggtgacgat cagtccaagc aggtcatgcc cggtgacaac gttgagatga tcttgaagac 900
acaccgtccc gttgccgccc aagctggtca g 931

```

```

<210> 911
<211> 20
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence:
      Oligonucleotide

```

```

<400> 911
gacggmkkca tgccgcarac 20

```

```

<210> 912
<211> 20
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence:
      Oligonucleotide

```

```

<400> 912
gacggcgkca tgccgcarac 20

```

```

<210> 913
<211> 20
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence:
      Oligonucleotide

```

```

<400> 913
gacggsyca tgccckcagac 20

```

```

<210> 914
<211> 21
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence:
      Oligonucleotide

```

<400> 914 21
gaaragctgc ggrcgtagt g

<210> 915
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 915 21
aaacgcctga ggrcggtagt t

<210> 916
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 916 20
gccgagctgg ccggcttcag

<210> 917
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 917 22
tcgtgctacc cgtygccgcc at

<210> 918
<211> 1391
<212> DNA
<213> Escherichia coli strain J01672

<400> 918
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ttgcagacct tgtggcaaca atttctacaa aacacttgat actgtatgag catacagtat 180
aattgcttca acagaacata ttgactatcc ggtattaccc ggcatgacag gagtaaaaaat 240
ggctatcgac gaaaacaaac agaaagcgtt ggcggcagca ctgggcccaga ttgagaaaca 300
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ctctaccggt tcgctttcac tggatatcgc gcttggggca ggtggtctgc cgatgggccc 420
tattcgctgaa atctacggac cggaatcttc cggtaaaacc acgctgacgc tgcagggtgat 480
cgccgcagcg cagcgtgaag gtaaaacctg tgcgtttatc gatgctgaac acgcgctgga 540
cccaatctac gcacgtaaac tgggcgctga tatcgacaac ctgctgtgct cccagccgga 600
caccggcgag caggcactgg aaatctgtga cgccctggcg cgttctggcg cagtagacgt 660
tatcgctggt gactccgtgg cggcactgac gccgaaagcg gaaatcgaag gcgaaatcgg 720
cgactctcac atgggccttg cggcacgtat gatgagccag gcgatgcgta agctggcggg 780
taacctgaag cagtccaaca cgctgctgat cttcatcaac cagatccgta tgaaaattgg 840
tgtgatgttc ggtaaccgg aaaccactac cgggtggaac gcgctgaaat tctacgcctc 900
tgttcgtctc gacatccgtc gtatcggcgc ggtgaaagag ggcgaaaacg tgggtgggtag 960
cgaaacccgc gtgaaagtgg tgaagaacaa aatcgctgcg ccgttttaac aggctgaatt 1020

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tgatagcgaa ggcgtagcag aaactaacga agatttttaa tcgtcttggt tgatacacia 1320
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acatcccgtc g                                     1391

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<210> 919

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
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<223> n represents a modified base

<220>

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<222> (6)..(6)

<223> n represents a modified base

<220>

<221> misc_feature

<222> (12)..(12)

<223> n represents a modified base

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<222> (15)..(15)

<223> n represents a modified base

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<222> (18)..(18)

<223> n represents a modified base

<220>

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<222> (3)..(3)

<223> i

<220>

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<222> (6)..(6)

<223> i

<220>

<221> modified_base

<222> (12)..(12)

<223> i

<220>

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<222> (15)..(15)

<223> i

<220>

<221> modified_base

<222> (18)..(18)

<223> i

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<210> 920
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

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<220>
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<223> n represents a modified base

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<223> i

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<222> (18)..(18)
<223> i

<220>
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<223> i

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<210> 921
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<220>
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Oligonucleotide

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<223> n represents a modified base

<220>
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<222> (12)..(12)
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<220>
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<220>
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<222> (12)..(12)
<223> i

<220>
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<222> (18)..(18)
<223> i

<400> 921
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<210> 922
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
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Oligonucleotide

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<223> n represents a modified base

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<223> n represents a modified base

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<223> i

<220>
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<222> (21)..(21)
<223> i

<400> 922
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<210> 923
<211> 21
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
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<220>

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<222> (6)..(6)

<223> n represents a modified base

<220>

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<223> i

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21

<210> 924

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 924

acctcagtcg tcacgttggc g

21

<210> 925

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 925

aagcagatgg ttgtgtgctg

20

<210> 926

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 926

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24

<210> 927

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:

Oligonucleotide

<400> 927 19
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<210> 928
<211> 22
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 928 22
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<210> 929
<211> 448
<212> DNA
<213> *Bacteroides fragilis* ATCC 25285

<400> 929
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cgggacgtaa gctgatggag cgtaccatta ttatcgcaaa tacatcgaac atgccggtag 180
cagcgcgtga agcttctgtg tatacggcca tgacgattgc cgaatactat cgtgccatgg 240
gattgaaagt cctgctgatg gcagactcca cttcccgttg ggcgaggca ttgctgaga 300
tgtcgaaccg tatggaggag ttgcccggac cggatgcatt cccgatggac ctgtcctcaa 360
tcatttctaa cttctatggc cgtgcaggct acgtgaaact gaataacggc gagagcggtt 420
ctattacctt tatcgggtaca gtatcacc 448

<210> 930
<211> 438
<212> DNA
<213> *Bacteroides distasonis* ATCC 8503

<400> 930
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aatgaggtcg tagaggtatt tacggagttc ccggaattgg tagaccgcga tacgggacgt 120
aaattgatgg aacgtacgat cattatcgcc aatacatcca acatgccggt agccgctcgt 180
gaggcatccg tatatacggc gatgaccatc gccgagtatt atcgcagcat gggtttgaag 240
gttctgttga tggccgactc tacttcccgc tgggcacagg ctttgcgtga gatgtccaac 300
cgtttgagg agttgccggg accggatgct ttcccgatgg acttgtccgc tatcgtggcg 360
aacttctacg ctcggtgcggg attcggttcat ttgaataaca acgctacagg ctccgtcact 420
ttcatcggtg cgggtatcg 438

<210> 931
<211> 453
<212> DNA
<213> *Porphyromonas asaccharolytica* ATCC 25260

<400> 931
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tgagcgtgct aatgaggtgg tggagatctt tgccgagttc cctgagctcg aagaccaca 120
cacgggacgc aagctgatgg agcgtacgat catcatcgct aacacgagta acatgccagt 180
ggctgctcgt gaggcttcgg tctacaccgc tatgaccatc gctgagtact accgctcgt 240
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gatgtctaac cgtctagagg agctgcctgg accagatgca ttcccgatgg acttgtcggc 360
tatcgtggca aacttctacg ctcggtgccg cttcgtctat ctcaacaacg gtgagacagg 420
ttctgtaacc ttcatcggtg cgggtctctcc agc 453

<210> 932
 <211> 835
 <212> DNA
 <213> *Listeria monocytogenes* ATCC 15313

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<400> 932
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ggttgacgat gaagaattac tagaattagt tgaaatggaa attcgtgatc tattaactga 180
atatgaattc cctggcgatg acattcctgt aatcaaagggt tcagctctta aagcacttca 240
aggtgaagct gactgggaag ctaaaaattga cgagttaatg gaagctgtag attcttacat 300
tccaactccw gaacgtgata ctgacaaaacc attcatgatg ccagttgagg atgtattctc 360
aatcactggt cgtggaacag ttgcaactgg acgtgttgaa cgtggacaag ttaaagttgg 420
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tactccacac actaacttca aagctgaaac ttatgtttta actaaagaag aaggtggacg 660
tcacactcca ttcttcaaca actaccgccc acaattctat ttccgtacta ctgacgtaac 720
tggtattggt acacttccag aaggtactga aatggtaayg cctggtgata acattgagct 780
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<210> 933
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
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<220>
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 <222> (10)..(10)
 <223> n represents a modified base

<220>
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 <223> i

<400> 933
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24

<210> 934
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 <213> Artificial Sequence

<220>
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 <222> (21)..(21)
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 <223> i

<400> 934
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24

<210> 935
<211> 23
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<213> Artificial Sequence

<220>
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Oligonucleotide

<220>
<221> misc_feature
<222> (3)..(3)
<223> n represents a modified base

<220>
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<222> (9)..(9)
<223> n represents a modified base

<220>
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<222> (15)..(15)
<223> n represents a modified base

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<222> (3)..(3)
<223> i

<220>
<221> modified_base
<222> (9)..(9)
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<220>
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<223> i

<400> 935
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23

<210> 936
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
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Oligonucleotide

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<223> n represents a modified base

<220>
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<222> (5)..(5)
<223> n represents a modified base

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<223> n represents a modified base

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<222> (12)..(12)

<223> n represents a modified base

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<222> (18)..(18)

<223> n represents a modified base

<220>

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<222> (5)..(5)

<223> i

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<222> (12)..(12)

<223> i

<220>

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<222> (18)..(18)

<223> i

<400> 936

tcnsnytcng gnarrcangg

20

<210> 937

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<220>

<221> misc_feature

<222> (3)..(3)

<223> n represents a modified base

<220>

<221> misc_feature

<222> (6)..(6)

<223> n represents a modified base

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<222> (12)..(12)

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<223> i

<400> 937
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23

<210> 938
<211> 20
<212> DNA
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<220>
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Oligonucleotide

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<400> 938
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<210> 939
<211> 1203
<212> DNA
<213> *Saccharomyces cerevisiae*

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aaaaagggtg agggatgtca aagattatgc aaagtgtgtg actcaccttg cttaccagag 1140
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<210> 940
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<212> DNA
<213> *Saccharomyces cerevisiae* strain GRF88

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tacagaaact ccaaccctaa gaggtaggat ccctgaagat acttgggact tcaaaaagca 240
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cgcgatgat tcttccctgg aagcgccatt ttatagcaag aaatgtaagt caagtatatt 360
ttaactgtat atacaacaat atgactcttt tttatgcctt gttgtttttc ttcgggtttt 420

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cagaggaatt taatgttgca gtatttctga caaaccaagt tcaatcagac ccaggtgctt 1560
ctgcattatt tgcctcggca gatggttaga aaccaattgg agggcacgtt ctggcacatg 1620
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aagattcccc agatatgcct gaaaaagaat gtgtctacgt aattggtgaa aaaggtatta 1740
ccgattcaag tgactagtgt ttgtatactt ttttaatgaa gatgacattg ctcctttatt 1800
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<210> 941

<211> 430

<212> DNA

<213> *Cryptococcus humicolus* ATCC 38294

<400> 941

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tggtgtcatc aacctcgagg gcgactccaa ggctcgctctc gtcttcggcc agatgaacga 180
gccccccgga gcccggtgcc gtgtcgccct taccggcctc accatcgccg agtacttccg 240
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cggttccgag gtgtctgccc ttctcggtcg tatccctcgc gccgtcggtt accagcccac 360
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<210> 942

<211> 794

<212> DNA

<213> *Escherichia coli* ATCC 43895

<400> 942

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cgtgtacgat gctcttgagg tgcaaaatgg taatgagcgt ctggtgctgg aagttcagca 60
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cgggtctggat gtaaaagacc tcgaacaccc gatcgaagtc ccggtaggta aagcgactct 180
gggcggtatc atgaacgtac tgggtgaacc ggtcgacatg aaaggcgaga tgggtgaaga 240
agagcgttgg gcgattcacc ggcgagcacc ttcctacgaa gagctgtcaa actctcagga 300
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taacatcgcg atcgagcact ccggttactc tgtgtttgcg ggcgtagggtg aagtatccct 540
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ggtgtatggc cagatgaacg agccgccggg aaaccgtctg cgcgtagctc tgaccgggtc 660
gacctgggtc gagaaattcc gtgacgaagg tcgtgacgtt ctgctgttcg ttgacaacat 720
ctatcggttac accctggccg gtacggaagt atccgcactg ctgggcccgtg tgccttcagc 780
gttaggttat cagccgacct tggcggaaga gatgggcgtt ctgcaggaaac gtatcacctc 794
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<210> 943

<211> 814

<212> DNA

<213> Escherichia coli ATCC 35401

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<400> 943
atgccgtacc ggcggtgtac gatgctcttg aggtgcaaaa tggtaatgag cgtctggtgc 60
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acgggtctgcg tcgcggtctg gatgtaaaag acctcgaaca cccgattgaa gtcccggtag 180
gtaaagcgac tctggggcgt atcatgaacg tactgggtga accggtcgac atgaaaggcg 240
agatcgggtga agaagagcgt tgggcgattc accgcgcagc accttcctac gaagagctgt 300
caaactctca ggaactgctg gaaaccggta tcaaagttat cgacctgatg tgtccgttcg 360
ctaagggcgg taaagttggt ctgttcgggt gtgcggtgtg aggtaaaacc gtaaacatga 420
tggagctcat tcgtaacatc gcgatcgagc actccgggtt ctctgtgttt gcgggcgtag 480
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tcgttgacaa catctatcgt tacaccctgg ccggtacgga agtatccgca ctgctgggcc 720
gtatgccttc agcggtaggt tatcagccga cctggcgga agagatgggc gttctgcagg 780
aacgtatcac ctccacaaa actggttcta tcac 814

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<210> 944

<211> 798

<212> DNA

<213> Escherichia coli ATCC 11775

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<400> 944
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ggctcggatg taaaagacct cgaacacccg atcgaagtcc cggtaggtaa agcgactctg 180
ggccgtatca tgaacgtact ggggtgaaccg gtcgacatga aaggcgagat cggngaagaa 240
gagcgtttgg cgattcacgg cgcgacacct tcctacgaag agctgtcaaa ctctcaggaa 300
ctgctgaaaa ccggtatcaa agttatcgac ctgatgtgtc cgttcgctaa gggcggtaaa 360
gttgggtcgt tcggtgggtg ggggtgtaggt aaaaccgtaa acatgatgga gcttattcgt 420
aacatcgcg tcgagcactc cggttactct gtgtttgcgg gcgtagggtg acgtactcgt 480
gagggtaacg acttctacca cgaaatgacc gactccaacg ttatcgacaa agtatccctg 540
gtgtatggcc agatgaacga gccgcgggga aaccgtctgc gcgttgctct gaccgggtctg 600
accatggctg agaaattccg tgacgaaggt cgtgacgttc tgctgttcgt tgacaacatc 660
tatcgtttaca ccctggccgg tacggaagta tccgcactgc tgggcccgtat gccttcagcg 720
gtaggttatc agccgaccct ggcggaagag atgggcgttc tgcaggaacg tatcacctcc 780
accaaaccg gttctatc

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<210> 945

<211> 812

<212> DNA

<213> Escherichia coli ATCC 25922

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<400> 945
atgccgtacc ggcggtgtac gatgctcttg aggtgcaaaa tggtaatgag cgtctggtgc 60
tggaagttca gcagcagctc ggcggcggtg tcgtgctgac catcgcaatg gggtcctccg 120
acgggtctgcg tcgcggtctg gatgtaaaag acctcgaaca cccgatcgaa gtcccggtag 180
gtaaagcgac tctggggcgt atcatgaacg tactgggtga accggtcgac atgaaaggcg 240
agatcgggtga agaagagcgt tgggcgattc accgcgcagc accttcctac gaagagctgt 300
caaactctca ggaactgctg gaaaccggta tcaaagttat cgacctgatg tgtccgttcg 360
ctaagggcgg taaagttggt ctgttcgggt gtgcggtgtg aggtaaaacc gtaaacatga 420
tggagcttat tcgtaacatc gcgatcgagc actccgggtt ctctgtgttt gcgggcgtag 480
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ctctgaccgg tctgaccatg gctgagaaat tccgtgacga aggtcgtgac gtattgctgt 660
tcgtcgataa catctatcgt tacaccctgg ccggtaccga agtatccgca ctgctgggcc 720
gtatgccttc agcggtaggt tatcagccga cctggcgga agagatgggc gttctgcagg 780
aacgtatcac ctccacaaa accggttcta tc 812

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<210> 946

<211> 832

<212> DNA

<213> *Neisseria polysaccharea* ATCC 43768

<400> 946
gcgacgctat cccgcatgtt tacgatgccc tgaaattgga cgagaacggt ctgactctgg 60
aagttcaaca acttctgggt gacggcggtt tccgtactat tgcaatgggt agttcagacg 120
gcctgaaacg cggcatgtct gtaagcaata ctgggtgcgc aatcactgtg ccggtaggta 180
aagggtacttt gggctcgatt gtcgacgtat tgggtacgcc tgttgatgaa gcaggtccga 240
tcgataccga caagagccgt gccattcacc aaactgctcc gaaattcgac gagttgtctg 300
caactaccga attgttgga accggtatta aagtgatcga cttgctgtgt ccggttgcta 360
aaggcggttaa agtaggtctg ttcggtgggt cgggtgtagg caaaaccgtg aacatgatgg 420
aattgatcaa caacatcgcc aaagcgcaca gcggtctgtc cgtgttcgca ggtgtgggcg 480
agcgtaccgg tgaaggtaac gacttctacc acgagatgaa agattccaac gtattggata 540
aagtggcaat gggttacggg cagatgaacg aacctccggg caaccgtttg cgcgtcgcat 600
tgaccgggtt gaccatggcg gaatacttcc gtgacgaaaa agacgaaaaa ggtaaagggtc 660
gcgacgtatt gttcttcggt gacaacatct accgttacac tctggccggg accgaagtat 720
ctgcactggt gggccggtat cttctgcag tgggttacca accgacattg gctgaagaaa 780
tgggtcggtt gcaagagcgt attacctcta cccaaaccgg ttccattact tc 832

<210> 947

<211> 840

<212> DNA

<213> *Neisseria sicca* ATCC 9913

<400> 947
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tttggaaagta caacagcttc tgggcgacgg cgtgggtcgt actattgcaa tgggtagttc 120
ggacggctctg aaacgcggca tgactgtaag caatacagat gcgccgatta ctgtgccggt 180
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tccgattgat accgacaaa accgtgctat ccatacagaca gctccgaaat tcgatgagtt 300
gtctgtact accgagctgc tggaaacagg cattaaagtg attgacttgc tgtgtccggt 360
tgccaaaggc ggtaaagtag gtctgttcgg tgggtgccgg gttaggcaaaa ccgtcaacat 420
gatggaaattg attacaaca tcgccaaagc gcatagtggt ttgtccgtgt tcgccggtgt 480
gggggaacgt acccgtgaag gtaacgactt ctaccacgag atgaaagatt ccaacgtatt 540
ggacaaagtg gcgatgggtt acggtcagat gaacgaacct ccgggtaacc gtctgcgtgt 600
agccttgacc gggttgacga tggccgaata cttccgtgat gaaaaagacg aaagcggcaa 660
aggctcgac gtattgttct tcgtggacaa catttaccgt tacactctgg ccggtacaga 720
agtatccgca ttgctcgggt gtatgccttc agcagtaggt taccaaccga cattgggtga 780
agaaatgggt cgctcgcaag agcgtattac cctctactca aacagggtcc attacttcta 840

<210> 948

<211> 843

<212> DNA

<213> *Streptococcus mitis* ATCC 903

<400> 948
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aaaaaatcaa aaatcgctcct tgaagtagct cttgagcttg gtgatggagt ggttcggacc 120
atcgctatgg aatcaacgga tgggttgact cgtggcatgg aagtgctaga tactggccgt 180
ccaatttctg tgccagtcgg caaagaaaca cttggctcgg tctttaacgt tttgggagat 240
accattgact tggatgctcc ttttgccgat gatgcagagc gccagccaat ccataagaaa 300
gctccaaact ttgatagatt gtctacttct tcagagatct tagagacagg tatcaagggt 360
atcgacctgt tagcccctta tctgaaagggt ggtaaagtgt gactcttcgg tgggtccgga 420
gttggttaaga ccgtcctgat tcaagaattg atccacaaca ttgcccaaga acacggtggt 480
atttctgtat ttactggcgt tggggaacgt acccgtgaag ggaatgacct ttattgggaa 540
atgaaagagt ctggtgttat cgagaaaaa gccatgggtc tcagagatct ttgcagaata cttccgtgat 600
ccaggagcgc gtatgcgggt tgctttgact gggttgacga ttgcagaata cttccgtgat 660
gtggaagggt aagatgtctt gctcttcatt gacaacatct tccgtttcac gcaggcagg 720
tctgaagttt ctgccctttt gggctcggat ccgtcagccg ttggttacca accaacactt 780
gcgacagaaa tggggcaatt gcaagagcgt atcacatcga ctaagaaggg ttctgtaacc 843
tct

<210> 949

<211> 841

<212> DNA

<213> Streptococcus mitis ATCC 49456

<400> 949

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gcagcagggg aaaaacttcc tgagattaac aatgcacttg tcgtctacaa aaatgacgaa 60
agaaaaacaa aaatcgtcct tgaagtagcc ttggagtggg gagatgggat ggtccgtact 120
atcgccatgg aatcaacaga tggtttgact cgtggaatgg aagtattgga cacaggctcg 180
ccaatctctg taccagtagg taaagaaact ttgggacgtg tcttcaatgt tttgggagat 240
accattgact tggaagctcc ttttacagaa gatgcagagc gtcagccaat tcataaaaaa 300
gctccaactt ttgatgaatt gtctacctct tctgaaatcc ttgaaacagg gattaagggt 360
atcgaccttc ttgcccctta ccttaaagggt ggtaagggtg gacttttcgg tgggtgccgga 420
gttggtaaaa ccgtcttaat ccaagaattg attcacaaca ttgccaaga acacgggtgg 480
atcttcagtat ttaccgggtg tggggaacgt actcgtgagg gtaatgacct ttactgggaa 540
atgaaagaat cagggtgttat cgagaaaaca gccatgggat ttggtcagat gaatgagccg 600
ccaggagcac gtatgcgtgt tgccctaact gggttgacaa tcgccgaata cttccgtgat 660
gtggaaggcc aagacgtgct tctctttatc gataatatct tccgtttcac tcaggctggg 720
tcagaagtat ctgccctttt gggtcgatg ccatcagccg ttggttacca accaactctt 780
gtacacggaaa tgggtcaatt gcaagagcgt attacatcaa ctaaaaaggg ttctgtaacc 840
t
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<210> 950

<211> 827

<212> DNA

<213> Streptococcus mitis strain LSPQ 2583

<400> 950

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cgtccttgaa gtagctcttg agcttgggtg tggagtgggt cggaccatcg ctatggaaatc 120
aacggatggg ttgactcgtg gcatggaagt gctagatact ggctcgtcaa tttctgtgcc 180
agtccgcaaa gaaacacttg gtcgcgtctt taacgttttg ggagatacca ttgacttgga 240
tgctcctttt gcggatgatg cagagcgcca gccaatccat aagaaagctc caacctttga 300
tgagttgtct acttcatcag agatcttaga gacagggtatc aaggttatcg acctgttagc 360
accttatctg aaaggtggta aagtcggact cttcgggtgg gccggagtgg gtaagaccgt 420
cctgattcag gaattgatcc acaacattgc ccaagagcat ggtggtatct ccgtgtttac 480
cgggtgttgg gaacgtaccc gtgaagggaa tgacctttac tgggaaatga aggagtctgg 540
cgttatcgag aaaacagcca tgggtcttcg tcagatgaat gagccaccag gagcgcgat 600
gcgggttgct ttgactgggt tgacgattgc agagtacttc cgtgatgtag aagggtcaaga 660
tgtcttgctc ttcattgaca acatcttcgg ttccacgcag gcaggttctg aagtctctgc 720
ccttttgggt cggatgccat cagccgttgg ttaccaacca acacttgcca ctgaaatggg 780
acaactccaa gagcgtatta catcgactaa gaaaggttct gtaactt 827
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<210> 951

<211> 844

<212> DNA

<213> Streptococcus oralis ATCC 35037

<400> 951

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gcagcagggg aaacacttcc tgagattaat aatgcacttg tcgtctacaa aaatgacgaa 60
agaaaaacaa aaatcgtcct tgaagtagcc ttggagtggg gtgatgggat ggtccgtact 120
atcgccatgg aatcaacaga tggtttgact cgtggaatgg aagttttgga cacaggccgt 180
ccaatctctg taccagtagg taaagaaact ttgggacgtg tcttcaacgt tttgggagat 240
actattgact tggatgctcc tttcgctgaa gacgctgagc gtcagccaat tcataagaaa 300
gctccaactt ttgatgaatt gtctacctca tctgaaatct tggaaacagg gattaagggt 360
atcgaccttc ttgcccctta ccttaaagggt gggaaagggt gactcttcgg tgggtgccgga 420
gttggtaaaa ctgtcttgat ccaagagttg attcacaaca ttgccaaga acatgggtgg 480
atcttcagtat ttaccgggtg tggagaacgt acccgtgagg ggaacgacct ttactgggaa 540
atgaaagaat caggcggttat cgagaaaaca gccatgggat ttggtcagat gaatgagcca 600
cctggagcac gtatgcgtgt tgctcttact gggttgacaa tcgccgaata cttccgtgat 660
gtagaaggcc aagatgtgct tctctttatc gacaatatct tccgtttcac tcaagctggg 720
tcagaagtat ctgccctttt gggtcggatg ccttcagccg ttggttacca accaactctt 780
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<210> 952
 <211> 830
 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-06

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<400> 952
gcagcagggg aaaaacttcc tgagattaac aatgcacttg tcgtctacaa aaatgacgaa 60
agaaaaacaa aaatcgctct tgaagtagcc ttggagttag gagatgggat gggttcgtact 120
atcgccatgg aatcaacaga tgggttgact cgtggaatgg aagtattgga cacaggctcg 180
ccaatctctg taccagtagg taaagaaact ttgggacgtg tcttcaacgt tttgggagat 240
accattgatt tggaagctcc ttttacagaa gacgcagagc gtcagccaat tcataaaaaa 300
gctccaactt ttgatgagtt gtctacctct tctgaaatcc ttgaaacagg gatcaagggt 360
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gttggtaaaa ccgtcttaaat ccaagaattg attcacaaca ttgcccaaga gcacgggtgg 480
atttcagtat ttactgggtg tggggaacgt actcgtgagg ggaatgacct ttactgggaa 540
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ccaggagcac gtatgctgtg tgcccttact gggttgacaa tcgctgaata cttccgtgat 660
gtggaaggcc aagacgtgct tctctttatc gataatatct tccgtttcac tcaggctggg 720
tcagaagtat ctgccctttt gggtcgtatg ccatcagccg ttggttacca accaacactt 780
gctacggaaa tgggtcaatt gcaagaacgt atcacatcaa ccaagaaggg 830
  
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<210> 953
 <211> 823
 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-11

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<400> 953
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aaatcgctct tgaagtagcc ttggagttag gagatgggat gggttcgtact atcgccatgg 120
aatcaacaga tgggttgact cgtggaatgg aagtattgga cacaggctcg ccaatctctg 180
taccagtagg taaagaaact ttgggacgtg tcttcaacgt tttgggagat accattgatt 240
tggaagctcc ttttacagaa gacgcagagc gtcagccaat tcataaaaaa gctccaactt 300
ttgatgagtt gtctacctct tctgaaatcc ttgaaacagg gatcaagggt attgaccttc 360
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ccgtcttaaat ccaagaattg attcacaaca ttgcccaaga gcacgggtggg atttcagtat 480
ttactgggtg tggggaacgt actcgtgagg ggaatgacct ttactgggaa atgaaagaat 540
caggcggtat cgagaaaaca gccatgggtc ttggtcagat gaatgagcca ccaggagcac 600
gtatgctgtg tgcccttact gggttgacaa tcgctgaata cttccgtgat gtggaaggcc 660
aagacgtgct tctctttatc gataatatct tccgtttcac tcaggctggg tcagaagtat 720
ctgccctttt gggtcgtatg ccatcagccg ttggttacca accaacactt gctacggaaa 780
tgggtcaatt gcaagaacgt atcacatcaa ctaagaaggg ttc 823
  
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<210> 954
 <211> 844
 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-55

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<400> 954
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agaaaaacaa aaatcgctct tgaagtagcc ttggagttag gagatgggat gggttcgtact 120
atcgccatgg aatcaacaga tgggttgact cgtggaatgg aagtattgga cacaggctcg 180
ccaatctctg taccagtagg taaagaaact ttgggacgtg tcttcaacgt tttgggagat 240
accattgact tggaagctcc ttttacagaa gacgcagagc gtcagccaat tcataaaaaa 300
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gttggtaaaa ctgtcttaaat ccaagaattg attcacaaca ttgcccaaga gcacgggtgg 480
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atgaaagaat caggcggtat cgagaaaaca gccatgggtc ttggtcagat gaatgagcca 600
ccaggagcac gtatgctgtg tgcccttact gggttgacaa tcgctgaata cttccgtgat 660
gtggaaggcc aagacgtgct tctctttatc gataatatct tccgtttcac tcaggctggg 720
tcagaagtat ctgccctttt gggtcgtatg ccatcagccg ttggttacca accaacactt 780
gctacggaaa tgggtcaatt gcaagaacgt atcacatcaa ccaagaaggg ttctgtaacc 844
tcta
  
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<210> 955
 <211> 834
 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-05

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<400> 955
aaaaacttcc tgagattaac aatgcacttg tcgtctacaa aaatgacgaa agaaaaacaa 60
aaatcgtcct tgaagtagcc ttggagtttag gagatggtat gggttcgtact atcgccatgg 120
aatcaacaga tgggttgact cgtggaatgg aagtattgga cacagggtcgt ccaatctctg 180
taccagtagg taaagaaact ttgggacgtg tcttcaacgt tttgggagat accattgatt 240
tggaagctcc ttttacagaa gacgcagagc gtcagccaat tcataaaaaa gctccaactt 300
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ccgtcttaat ccaagaattg attcacaaca ttgcccaga gcacgggtgg atttcagtat 480
ttactgggtg tggggaacgt actcgtgagg ggaatgacct ttactgggaa atgaaagaat 540
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gtatgcgtgt tgcccttact gggtttgacaa tcgctgaata cttccgtgat gtggaaggcc 660
aagacgtgct tctctttatc gataatatct tccgtttcac tcaggctggt tcagaagtat 720
ctgccctttt ggggtcgtag ccatcagccg ttgggtacca accaacactt gctacggaaa 780
tgggtcaatt gcaagaacgt atcacatcaa ccaagaaggg ttctgtaacc tcta 834
    
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<210> 956
 <211> 495
 <212> DNA
 <213> Babesia microtti strain Persing-1

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<400> 956
ttgtatatca caggcactca gcaaatatcc cgatactgac gtaattatat acgtgggttg 60
tggtgaacgt gggaatgaaa tggctgagat tctatgcaa ttccctgaac tatctactgt 120
agttaatgat gaaaagggtg ccattatgga acgtacatgc ttagttgcca atacttctaa 180
tatgccagtg gccgctagag aagctagtag atacactggt attacaattg ctgaatattt 240
ccgtgatatg gggttacaact gcactcttat ggccgattcc actagccgat gggcagaggc 300
tctaagggaa atttctggta gattggctga aatgcctgca gattctggct atccggccta 360
tttatcgta aggttgtcag ctttttatga acgtgcagggt gggataactg tctaattaat 420
ttaggcttga ttaagtgtt aggttcacca acacgaaccg gatctattac ggttgttaga 480
cgagtttctc cacca 495
    
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<210> 957
 <211> 469
 <212> DNA
 <213> Entamoeba histolytica strain HM1-1MSS

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<400> 957
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tggtgaacga ggaaatgaaa tggcagaagt tcttcgagat tttccagctc tttctattaa 120
agtaggagat aaagaagaat ctattatgac aagaacagca cttggttgcta atacatctaa 180
tatgcctgtt gcagcacgtg aagcatcaat ttatactgga attacattat cagaatatta 240
tagagatatg ggatataatg ttgctatgat ggcagattca acatcaagat ggggtgaagc 300
acttagagaa atttcaggac gtcttgacga aatgccagct gattctggat atccagcata 360
tcttgacgca cgttttagcat ctttttatga acgtgcagggt atgggttgaat gtttaggatc 420
acaaaaaga atagggtcag tttctattgt aggagctgtt tcaccacct 469
    
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<210> 958
 <211> 452
 <212> DNA
 <213> Fusobacterium nucleatum subsp. polymorphum ATCC 10953

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<400> 958
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caggacaatc tttaatgaag agaacagttc ttatagctaa tacttctaata atgccagttg 180
ctgctcgtga ggcttcaatc tatactggta taactattgc agaataattt agagatatgg 240
gatattcagt ggcacttatg gcgattcaa caagtcgttg ggcagaagca cttcgtgaaa 300
    
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tgtcaggacg tttggaagaa atgccagggtg atgaaggata tccagcatat ctatcaagta 360
 gaatagcaga gttttatgaa agagcagggc ttgttgaaatg tctaggtaat ggagaagaag 420
 gagcattaac tgtaattgga gcagtatctc ca 452

<210> 959
 <211> 469
 <212> DNA
 <213> *Leishmania aethiopica* ATCC 50119

<400> 959
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 gatcaatggt cgcgaggagt cgatcatgaa gcgcacctgc ctcgtggcga acacttcgaa 180
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 ccgtgatatg ggcaagcata tcgccatgat ggccgactcg acgtctcgct gggccgaggc 300
 gcttcgtgag atttcgggtc gtctggcgga gatgccggcc gatgggtggc accctgccta 360
 tctcagcgct cgtctcgct ccttctacga gcgcgccggc ctcgtcacct gcacgcggcg 420
 gccgaagcgc cagggctccg tcacgattgt cgggtgccgtg tctccgccg 469

<210> 960
 <211> 469
 <212> DNA
 <213> *Leishmania tropica* ATCC 30815

<400> 960
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 gatcgatggt cgcgaggagt cgatcatgaa gcgcacctgc ctcgtggcga acacttcgaa 180
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 gcttcgtgag atttcgggtc gtttggcgga gatgccggcc gatgggtggc accctgccta 360
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 gccgaagcgc cagggctccg tcacgattgt cgggtgccgtg tctccgccg 469

<210> 961
 <211> 469
 <212> DNA
 <213> *Leishmania guyanensis* ATCC 50126

<400> 961
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 gatcgatggt cgcgaagagt ccatcatgaa gcgcacctgc ctcgtggcga acacttcgaa 180
 catgcccgct gcagcccgtg aggcctctat ttataccggc atcacccttg ctgagtacta 240
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 gctgcgtgag atttcgggtc gattggcgga gatgccggct gatgggtggc accctgccta 360
 cctcagcgcc cgcctcgct ccttctacga gcgcgccggc ctcgtcacct gcacgcggcg 420
 gccgaagcgc cagggctccg tcacgatcgt cgggtgcagt tctccaccg 469

<210> 962
 <211> 469
 <212> DNA
 <213> *Leishmania donovani* ATCC 50212

<400> 962
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 gatcgatggc cgcgaggagt cgatcatgaa gcgcacctgc ctcgtggcga acacttcgaa 180
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 gcttcgtgag atttcgggtc gtctggcgga gatgccggcc gatgggtggc accctgccta 360
 cctcagcgct cgtctcgct ccttctacga gcgcgccggc ctcgtcacct gcacgcggcg 420

gccgaagcgc caggggtccg tcacgatcgt cgggtgccgtg tctccaccg

<210> 963
<211> 469
<212> DNA
<213> Leishmania hertigi ATCC 50125

<400> 963									
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gatcgatggt	cgcgaggagt	ccatcatgaa	gcgcacctgc	ctcgtggcga	acacctccaa	180			
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gttgcgtag	atttcgggtc	ggctggcgga	gatgccggcc	gatgggtggt	accccgccta	360			
cctcagtgcc	cgtctcgct	ccttctacga	gcgcgctggc	ctcgtgacct	gtatcggcgg	420			
gccgaagcgc	caggggtccg	tcacaattgt	tggtgcggtg	tctccaccg		469			

<210> 964
<211> 469
<212> DNA
<213> Leishmania mexicana ATCC 50156

<400> 964									
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gatcgatggt	cgggaggagt	cgatcatgaa	gcgcacctgc	ctcgtggcga	acacctcgaa	180			
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ccgtgatatg	ggcaagcaca	tcgccatgat	ggccgactcg	acgtctcgct	gggctgaggc	300			
gcttcgtgag	atttcgggtc	gtctggcgga	gatgccggcc	gatgggtggt	accccgccta	360			
cctcagcgct	cgtctcgct	ccttctacga	gcgcgccggc	ctcgtcacct	gcacggcgcg	420			
gccgaagcgc	caggggtccg	tcacgatcgt	cgggtgccgtg	tctccgcgg		469			

<210> 965
<211> 469
<212> DNA
<213> Leishmania tropica ATCC 50129

<400> 965									
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gatcgatggt	cgcgaggagt	cgatcatgaa	gcgcacctgc	ctcgtggcga	acacttcgaa	180			
catgccagtc	gcagcccgtg	aggcctctat	ttacaccggc	atcacacctg	ccgagtacta	240			
ccgtgatatg	ggcaagcaca	tcgccatgat	ggccgactcg	acgtctcgct	gggcccaggc	300			
gcttcgtgag	atttcgggtc	gtttggcgga	gatgccggcc	gatgggtggt	acccctgccta	360			
tctcagcgct	cgtctcgct	ccttctacga	gcgcgccggc	ctcgtcacct	gcacggcgcg	420			
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<210> 966
<211> 449
<212> DNA
<213> Peptostreptococcus anaerobius ATCC 27337

<400> 966									
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gaatctctaa	tgaagagaac	agttcttata	gctaatacgt	caaataatgcc	agttgcagcc	180			
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ggtcgtctag	aagaaatgcc	tggtgatgaa	ggttatccag	gtagcgataa	tagagaggga	360			
gcagagttct	atgaaagagc	aggtaaggta	atatgtaagg			420			
gcccttacia	taataggtgc	cgtgtcacc				449			

<210> 967
 <211> 826
 <212> DNA
 <213> Bordetella pertussis ATCC 9797

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<400> 967
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ccgttcttca acggctatcg tccgcagttc tacttccgca cgacggacgt gaccggcacg 720
atcgacctgc cggcggaaca ggaaatggtg ctgccgggcg acaacgtgtc gatgaccgtc 780
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<210> 968
 <211> 817
 <212> DNA
 <213> Bordetella pertussis strain BD180

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<400> 968
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gcgaggaaat cgaaatcgtg ggcatacaag cgacggtgaa gacgacctgc acgggcgtgg 480
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acacgccgtt cttcaacggc tatcgtccgc agttctactt ccgcacgacg gacgtgaccg 720
gcacgatcga cctgccggcg gacaaggaaa tgggtgctgc gggcgacaac gtgtcgatga 780
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<210> 969
 <211> 637
 <212> DNA
 <213> Enterococcus columbae ATCC 51263

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<400> 969
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atggaagtgc gtgacttatt aactgaatat gacttcccag gagacgatgt tcctgtaatc 180
gctggttctg cattaaaagc tttagaaggc gacctgctt acgaagaaaa aatcttagaa 240
ttaatggctg cagttgacga atacatccca actccagaac gtgacaacga caaaccattc 300
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gctggagaca acatcggtgc attattacgt ggtgtggctc gtgaagacat ccaacgtggt 540
caagtattag ctaaaaccagg ttcaatcact ccacatacaa aattcactgc tgaagtgtac 600
gttttaacta aagaagaagg tggacgtcat actccat 637
    
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<210> 970
 <211> 634
 <212> DNA

<213> *Enterococcus flavescens* ATCC 49997

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<400> 970
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ggaagtctgt gacttattgt cagaatatga cttcccaggc gacgatgttc ctgtaatcgc 180
tggttctgct ttgaaagctc ttgaaggcga tgcttcatac gaagaaaaaa tcatggaatt 240
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aggggataac attggtgcat tgctacgtgg gggtgctcgt gaagacatcc aacgtggaca 540
agtattagct aaagctggta caatcacacc tcatacaaaa tttaaagctg aagtttacgt 600
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<210> 971

<211> 787

<212> DNA

<213> *Streptococcus pneumoniae* strain StrR-55

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<400> 971
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gaaatggaaa tccgtgacct attgtcagaa tacgacttcc cagggtgacga tcttccagtt 180
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caattctact tccgtactac tgacgttaca ggttcaatcg aacttcagc aggtactgaa 720
atggtaatgc ctggtgataa cgtgacaatc gacgttgagt tgattcacc aatcgccgta 780
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<210> 972

<211> 803

<212> DNA

<213> *Escherichia coli* ATCC 35401

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<400> 972
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gtaccgttgt taccggtcgt gtagaacgcg gtatcatcaa agttggtgaa gaagttgaaa 420
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cggaaggcgt agagatggta atgccgggcg acaacatcaa aatggttggt accctgatcc 803
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<210> 973

<211> 762

<212> DNA

<213> *Escherichia coli* ATCC 43895

<400> 973


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aagccgttcc tgctgccgat cgaagacgta ttctccatct ccggtcgtgg taccgttggt 360
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<210> 974
 <211> 804
 <212> DNA
 <213> Escherichia coli ATCC 11775

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<400> 974
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<210> 975
 <211> 804
 <212> DNA
 <213> Escherichia coli ATCC 25922

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gatgacgaag agtgctgga actggttgaa atggaagtcc gtgaacttct gtctcagtac 180
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tccggtcgtg gtaccgttgt taccggctcg gtagaacgcg gtatcatcaa agttgggtgaa 420
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cacaccaagt tcgaatctga agtgatcatt ctgtccaaag atgaaggcgg tcgtcatact 660
ccgttcttca aaggctaccg tccgcagttc tacttccgta ctactgacgt gactggtacc 720
atcgaactgc cggaaggtgt agagatggta atgccgggcg acaacatcaa aatgggtggt 780
accctgatcc acccgatcgc gatg 804

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<210> 976
 <211> 825
 <212> DNA
 <213> Mycobacterium avium strain Mavi-1

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<400> 976
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ctgctcgcgc gtcagggtcgg tgtgcccctac atcctggtcg ccctgaacaa ggccgacatg 120
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<210> 977
 <211> 820
 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-06

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<400> 977
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cgacgaagaa ttgcttgaat tgggtgaaat ggaaatccgt gacctattgt cagaatacga 180
cttcccaggt gacgatcttc cagttatcca aggttcagca cttaaagctc ttgaaggtga 240
ctctaaatac gaagacatcg ttatggaatt gatgaacaca gttgatgagt atatccaga 300
accagaacgt gacactgaca aaccattgct tcttcagtc gaggacgtat tctcaatcac 360
tggacgtggt acagttgctt caggacgtat cgaccgtggt atcgttaaag tcaacgacga 420
aatcgaaatt gttggtatca aagaagaaac tcaaaaagca gttgttactg gtgttgaaat 480
gttccgtaaa caacttgacg aaggtcttgc tggagataac gtagggtgcc ttcttcgtgg 540
tgttcaacgt gatgaaatcg aacgtggaca agttatcgct aaaccagggt caatcaaccc 600
acacactaaa ttcaaagggt aagtctacat cttactaaa gaagaagggt gacgtcacac 660
tccattcttc aacaactacc gtccacaatt ctacttccgt actactgacg ttacaggttc 720
aatcgaactt ccagcaggtg ctgaaatggt aatgcctggt gataacgtga caatcgacgt 780
tgagttgatt caccatcg ccgtagaaca aggtactaca 820

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<210> 978
 <211> 822
 <212> DNA
 <213> Mycobacterium gordonae strain M-Gor-1

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<400> 978
ggcgcgatcc tgggtggtcgc cgccaccgat ggcccgatgc cgcagacccg tgagcacgtg 60
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gtcgacgacg aggagctgct cgagctcgtc gagctggagg tccgcgagtt gctggccgcc 180
caggacttcg acgaggaagc tccggtggtc cgggtctcgg cgctgaaggc gctcgagggc 240
gacgccacct gggtagagtc ggttagaggac ttgatggagg cggtcgacga gtcgattccg 300
gacccggtcc gcgacaccga caagccgttc ctgatgccc tggaggacgt cttcaccatc 360
accggtcgtg gcaccgtcgt caccggccgt gtggagcgcg gcgtggtgaa cgtgaacgag 420
gaagtcgaga tcgtcggcat caagccgacc agcaccaaga ccacggtcac cgggtggar 480
atgttccgca agctgctcga ccagggtcag gccggtgaca acgtcgggtc gctgctgctg 540
gggtgcaagc gtgaggacgt cgagcgcgcc caggctcgta tcaagcccgg caccaccact 600
ccgcacaccg agttcgaggg tcaggtctac atcctgtcca aggacgaggg cggccggcac 660
acgccgttct tcaacaacta ccgtccgcag ttctacttcc gcaccaccga cgtgaccggt 720
gtggtgacgc tgccggaggg caccgaaatg gtgatgccc gtgacaacac caacatctcg 780
gtgaagctga tccagcccgt cgccatggac gacggtctgc gg 822

```

<210> 979
 <211> 821
 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-11

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<400> 979
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tttcacgtca ggttggtggt aaacacctta tcgtcttcat gaacaaagtt gacttggttg 120
acgacgaaga attgcttgaa ttggttgaaa tggaaatccg tgacctattg tcagaatacg 180
acttcccagg tgacgatctt ccagttatcc aagggttcagc acttaaagct cttgaagggtg 240
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aaccagaacg tgacactgac aaaccattgc ttcttccagt cgaggacgta ttctcaatca 360
ctggacgtgg tacagttgct tcaggacgta tcgaccgtgg tatcggttaa gtcaacgacg 420
aaatcgaaat cgttggtatc aaagaagaaa ctcaaaaagc agttgttact ggtggtgaaa 480
tgttccgtaa acaacttgac gaaggtcttg ctggagataa cgtaggtgtc cttcttcgtg 540
gtgttcaacg tgatgaaatc gaacgtggac aagttatcgc taaaccaggt tcaatcaacc 600
cacacactaa attcaaaggt gaagtctaca tccttactaa agaagaaggt ggacgtcaca 660
ctccattctt caacaactac cgtccacaat tctacttccg tactactgac gttacaggtt 720
caatcgaact tccagcaggt actgaaatgg taatgcctgg tgataacgtg acaatcgacg 780
ttgagttgat tcacccaatc gccgtagaac aagggtactac a 821

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<210> 980
 <211> 828
 <212> DNA
 <213> Mycobacterium tuberculosis ATCC 25177

<220>
 <221> misc_feature
 <222> (817)..(817)
 <223> n represents any nucleotide

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<400> 980
ggtgcatcc tggtggtcgc cgccaccgac ggcccgatgc cccagacccg cgagcacgtt 60
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gtggacgacg aggagctgct cgaactcgtc gagatggagg tccgcgagct gctggctgcc 180
caggaattcg acgaggacgc cccggttggt cgggtctcgg cgctcaaggc gctcgagggt 240
gacgcgaagt gggttgcctc tgtcgaggaa ctgatgaacg cggtcgacga gtcgattccg 300
gacccggtcc gcgagaccga caagccgttc ctgatgccgg tcgaggacgt cttcaccatt 360
accggccgcg gaaccgtggt caccggacgt gtggagcgcg gcgtgatcaa cgtgaacgag 420
gaagttgaga tcgtcggcat tcgcccacgc accaccaaga ccaccgtcac cgggtgggag 480
atgttccgca agctgctcga ccagggccag gcgggcgaca acgttggttt gctgctgcgg 540
ggcgtcaagc gcgaggacgt cgagcgtggc cagggtgtca ccaagcccgg caccaccacg 600
ccgcacaccg agttcgaagg ccaggtctac atcctgtcca aggacgaggg cggccggcac 660
acgccgttct tcaacaacta ccgtccgcag ttctacttcc gcaccaccga cgtgaccggt 720
gtggtgacac tgccggaggg caccgagatg gtgatgcccg gtgacaacac caacatctcg 780
gtgaagttga tccagcccgt cgccatggac gaaggtnatg gtttcgcg 828

```

<210> 981
 <211> 819
 <212> DNA
 <213> Staphylococcus warneri strain CSG 144

```

<400> 981
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ggttgacgac gaagaattat tagaattagt tgaaatggaa gttcgtgact tattatctga 180
atacgacttc cctggtgacg atgtaccagt tatcgttggt tctgcattaa aagctttaga 240
aggcgaccca gaatacgaac aaaaaatctt agacttaatg caagctgtag atgactacat 300
cccaactcca gaacgtgact ctgataaacc attcatgatg ccagttgagg acgtattctc 360
aatcactggt cgtggtactg tagcaacagg ccgtgttgaa cgtggtcaaa tcaaagtcgg 420
tgaagaagtt gaaatcatcg gtatcactga agaaagcaag aaaacaacag ttacaggtgt 480
agaaatgttc cgtaaattat tagactacgc tgaagctggt gacaacatcg gtgctttatt 540
acgtggtggt gcacgtgaag acgtacaacg ttgacaagta ttagcagctc ctggctctat 600
tactccacac acaaaaattca aagctgatgt ttacgtttta tctaaagaag aaggtggacg 660
tcatactcca ttcttacta actaccgccc acaattctac ttccgtacta ctgacgtaac 720
tggcgttggt cacttaccag aaggctactg aatggttatg cctggcgata acgtagaaat 780
gactgttgaa ttaatcgctc caatcgcgat tgaagacgg 819

```

<210> 982
 <211> 814

<212> DNA
<213> Streptococcus mitis strain LSPQ 2583

```

<400> 982
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atgacgaaga attgcttgaa ttggttgaaa tggaaatccg tgacctcttg tcagaatacg 180
acttcccagg tgacgatctt ccagttatcc aagggttcagc tcttaaagct cttgaagggtg 240
atactaagta cgaagacatc atcatggaat tgatgaacac tgttgatgag tacatcccag 300
aaccagaacg tgatactgac aaacctcttc ttcttccagt cgaagacgta ttctcaatca 360
ctggctcgtg tacagttgct tcaggacgta tcgaccgtgg tactgttcgt gtcaacgatg 420
aaatcgaaat cggttggtatc aaagaagaaa tccaaaaagc agttgttact ggtgttgaaa 480
tggtccgtaa acagcttgac gaaggtcttg caggggacaa cgtaggtgta cttcttcgtg 540
gtatccaacg tgatgaaatc gaacgtggctc aagttatcgc taaaccaggt tcaatcaacc 600
cacacactaa attcaagggt gaagttttaca tccttactaa agaagaaggt ggacgtcaca 660
ctccattctt caacaactac cgtccacagt tctacttccg tacaactgac gttacaggtt 720
caatcgaaat tccagcaggt actgaaatgg taatgcctgg tgataacgta actatcgacg 780
ttgagttgat ccaccaatc gccgttgaac aagg 814

```

<210> 983
<211> 810
<212> DNA
<213> Streptococcus mitis ATCC 49456

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<400> 983
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acgacgaaga attgcttgaa ttggttgaaa tggaaatccg tgacctattg tcagaatacg 180
acttcccagg tgacgatctt ccagttatcc aagggttcagc tcttaaagcc cttgaagggtg 240
aactaaata cgaagacatc gttatggaat tgatgaacac agttgatgag tacatcccag 300
aaccagaacg tgacactgac aaaccattgc ttcttccagt cgaagacgta ttctcaatca 360
ctggctcgtg tacagttgct tcaggacgta tcgaccgtgg tatcggttaa gtcaacgacg 420
aaatcgaaat cggttggtatc aaagaagaaa ctcaaaaagc agttgttact ggtgttgaaa 480
tggtccgtaa acaacttgac gaaggtcttg ccgagataa tgtaggtgtc cttcttcgtg 540
gtgttcaacg tgatgaaatc gaacgtggac aagttattgc taaaccaggt tcaatcaacc 600
cacacactaa attcaaaagg gaagttttaca tccttactaa agaagaaggt ggacgtcaca 660
ctccattctt caacaactac cgtccacaat tctacttccg tactactgac gttacaggtt 720
caatcgaaat tccagcaggt actgaaatgg taatgcctgg tgataacgtg acaatcgacg 780
ttgagttgat ccaccaatc gccgtagaac 810

```

<210> 984
<211> 817
<212> DNA
<213> Streptococcus mitis ATCC 903

```

<400> 984
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acgaagaatt gcttgaattg gttgaaatgg aaatccgtga cctcttgta gaatacgact 180
tcccaggtga cgtcttcca gttatccaag gttcagctct taaagctctt gaagggtgata 240
ctaagtacga agacatcatc atggaattga tgaacactgt tgatgagtag atcccagaac 300
cagaacgtga tactgacaaa cctcttcttc ttccagtcga agacgtattc tcaatcactg 360
gtcgtggtac agttgcttca ggacgtatcg accgtggtag tggtcgtgtc aacgatgaaa 420
tcgaaatcgt tggatatcaa gaagaaatcc aaaaagcagt tgttactggt gttgaaatgt 480
tccgtaaaac gcttgacgaa ggtcttgtag gggacaacgt aggtgtactt cttcgtggta 540
tccaacgtga tgaaatcgaa cgtgggtcaa ttatcgctaa accaggttca atcaaccac 600
aactaaat caaggtgtaa gtttacatcc ttactaaaga agaaggtgga cgtcacactc 660
cattcttcaa caactaccgt ccacagttct acttccgtac aactgacgtt acaggttcaa 720
tcgaacttcc agcaggtact gaaatggtaa tgcttggtga taacgtaact atcgacgttg 780
agttgatcca cccaatcgcc gttgaacaag gtactac 817

```

<210> 985
<211> 798

<212> DNA

<213> *Streptococcus oralis* ATCC 35037

<400> 985

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gttgaaatgg	aaatccgtga	cctcttgtca	gaatacgact	tcccaggtga	cgatcttcca	180
gttatccaag	gttcagctct	taaagctctt	gaaggtgact	ctaaatacga	agacatcatt	240
atggaattga	tgaacactgt	tgatgagtac	atcccagaac	cagaacgtga	cactgaaaaa	300
ccattgcttc	ttccagtcga	agacgtattc	tcaatcactg	gacgtggtac	agttgcttca	360
ggacgtatcg	accgtggtag	tgttcgtgtc	aacgacgaaa	tcgaaatcgt	tggtatcaaa	420
gaagaaactc	aaaaagcagt	tgttactggg	gttgaaatgt	tccgtaaaaca	acttgacgaa	480
ggtcttgccg	gagataacgt	aggtgtcctt	cttcgtgggtg	ttcaacgtga	cgaatcgaa	540
cgtggacaag	ttatcgctaa	accaggttca	atcaaccac	acactaaatt	taaaggtgaa	600
gtctacatcc	ttactaaaga	agaaggtgga	cgtcacactc	cattcttcaa	caactaccgt	660
ccacaattct	acttccgtac	tactgacgtt	acaggttcaa	tcgaacttcc	tgcaggtact	720
gaaatggtaa	tgcttggtag	taacgtgact	atcgacgttg	agttgatcca	cccaatcgcc	780
gtagaacaag	gtactaca					798

<210> 986

<211> 815

<212> DNA

<213> *Streptococcus pneumoniae* strain StrR-05

<400> 986

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aagaattgct	tgaattgggt	gaaatggaaa	tccgtgacct	attgtcagaa	tacgacttcc	180
cagggtgacga	tcttccagtt	atccaagggt	cagcacttaa	agctcttgaa	ggtgactcta	240
aatacgaaga	catcgttatg	gaattgatga	acacagttga	tgagtatatt	ccagaaccag	300
aacgtgacac	tgacaaacca	ttgcttcttc	cagtcgagga	cgtattctca	atcactggac	360
gtggtacagt	tgcttcagga	cgtatcgacc	gtggtatcgt	taaagtcaac	gacgaaatcg	420
aaatcgttgg	tatcaaagaa	gaaactcaaa	aagcagttgt	tactgggtgt	gaaatgttcc	480
gtaaacaact	tgacgaaggt	cttgctggag	ataacgtagg	tgctcttctt	cgtgggtgtc	540
aacgtgatga	aatcgaaagt	ggacaagtta	tcgctaaacc	aggttcaatc	aacccacaca	600
ctaaattcaa	aggtgaagtc	tacatcctta	ctaaagaaga	aggtggacgt	cacactccat	660
tcttcaacaa	ctaccgtcca	caattctact	tccgtactac	tgacgtttaca	ggttcaatcg	720
aacttccagc	aggtactgaa	atggtaatgc	ctggtgataa	cgtgacaatc	gacgttgagt	780
tgattcaccc	aatcgccgta	gaacaaggta	ctaca			815

<210> 987

<211> 832

<212> DNA

<213> *Enterococcus hirae* ATCC 8043

<400> 987

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ttactttctc	gccaagtagg	cgtgaaatat	ttgattggtt	tcttgaacaa	aacagattta	120
gtcgtatgatg	aagaattaat	tgatctagta	gaaatgggaag	ttcgtgaact	attaagcgaa	180
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attactggac	gtggaacagt	agcatctggt	cggattgacc	gtggggctgt	tagagtcggt	420
gacgaaatcg	aaatcgtagg	gatcaaaacca	gaaacgcaaa	gagccgtagt	aacaggagtt	480
gaaatgttcc	gcaaaacgct	tgattacggt	gaagcagggg	ataacgtagg	tgtgttatta	540
cgtgggattc	aaagagaaga	catcgaacgt	ggccaagtga	ttgccaaacc	tggttcaatt	600
acacctcata	ctaaattcaa	agcagaagtt	taggttttga	ctaaagaaga	aggcggacgt	660
catacaccat	tcttcaataa	ttatcgacca	caattttatt	tccgcacaac	tgacgtaaca	720
ggaacaattg	ttttgccaga	aggaacggaa	atggtcatgc	ctggcgacaa	cgtaacgatc	780
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<210> 988

<211> 835

<212> DNA

<213> *Enterococcus mundtii* ATCC 43186

<400> 988

```

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ggtcgatgat gaagaattga tcgatcttgt agaaatggaa gttcgtgaat tactgaatga 180
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tgatgaaatc gagatcatcg gaatcaaacc tgaaacgaaa aaagcgggtg tgacaggggt 480
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cacaccacat acaaaattca aagcgggaag ttatgtattg acgaaagaag aaggcggacg 660
tcatacacca ttcttcaata actaccgccc acaattttat ttccgcacaa cagatgtaac 720
aggtacgatc gtgttgccag aaggaacaga aatggctcatg cctggagaca acgtaaccat 780
cgaggtagag ttgatccatc cagtggcaat cgaacaagga acgactttct ctatt 835

```

<210> 989

<211> 832

<212> DNA

<213> *Enterococcus raffinosus* ATCC 49427

<400> 989

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cgacgatgaa gaattgattg atttagttga aatggaagta cgtgagttac tttcagaata 180
tggtttccca ggcatgata ttctgttct taaaggttca gctctgaaag ctttagaagg 240
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aacaccagaa cgtgacactg acaaaccatt cttgttacca gtggaagatg ttttctcaat 360
cacaggacgt gggactgttg catctggctg tattgatcgt ggggaagtta aagtcggtga 420
cgaagttgaa attatcgagg tcaaacctga agttcaaaaag gctgtcgtaa ctggacttga 480
aatgttccgt aaaacattgg attatggtga agctggagat aacgttgggg ttctattacg 540
tggtattaca cgtgatgaaa tcgaacgtgg tcaagtatta gctaaaccag gttcaattac 600
accacatacg aaattcagtg cagaagttta tgtgttgacg aaagaagaag gtggacgtca 660
tacaccattc ttaacaact atcgtcctca attctacttc cgtacaacag acgttaccgg 720
taatatcgtg ttgccagaag gtactgaaat ggtcatgcct ggcgataacg taacaatcga 780
cgttgaatta atccatccaa tcgccgtaga aaaaggaaca acttttctcta tt 832

```

<210> 990

<211> 154

<212> DNA

<213> *Bacillus anthracis* strain CIP 9440

<400> 990

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ggatcctgta tatgcacaaa aactaggtgt taacatcgat gaattactat tatcacaacc 60
tgatacaggg gagcaagggt tagaaatcgc agaagcactt gtacgaagtg gtgcgggtga 120
tattatcgtg attgactctg tagcagctct tgta 154

```

<210> 991

<211> 384

<212> DNA

<213> *Prevotella melaninogenica* ATCC 25845

<400> 991

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gccattgcat aggcacagaa gcagggcggt attgcagcct tcattgatgc tgagcacgcc 60
ttcgaccgtt tctatgcaga gaagttagggt gtggatgttg ataacccttg ggtttcacag 120
ccagacaatg gtgagcaggg ttttagagatt gccgaccagc tgattcgctc ttccgctatt 180
gacattctcg ttgtcgactc agttgcagcc ttgactccaa agaaggagat tgaggggtgac 240
atgggtgact ctgcagtagg tttacaagca cgactgatga gtcaggcatt gcgtaaaact 300
acctcaacaa tcgcaaaaac taatacttgc tgcattctta tcaaccagtt gcgtgagaag 360
attggtgtga tgtttggtta tcca 384

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<210> 992
 <211> 624
 <212> DNA
 <213> Enterococcus casseliflavus strain R760

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<400> 992
acacgtgaac acatcttgtt atcacgtaac gttggtgtac catacatcgt tgttttctta 60
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gacttattgt cagaatatga cttcccaggc gacgatgttc ctgtaatcgc tggttctgct 180
ttgaaagctc ttgaaggcga tgcttcatac gaagaaaaaa tcatggaatt aatggctgca 240
gttgacgaat acgttccaac tccagaacgt gacactgaca aaccattcat gatgccagtc 300
gaagacgtat tctcaatcac tggacgtggt actgttgcta caggccgtgt tgaacgtgga 360
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attggtgcat tgctacgtgg tggtgctcgt gaagacatcc aacgtggaca agtattggct 540
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gaagaaggtg gacgtcatat acca
    
```

<210> 993
 <211> 756
 <212> DNA
 <213> Streptococcus pyogenes

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<400> 993
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agatctagtt tagttaaaaa ccttcaaaaat atatattttc tttatgaggg tgaccctggt 180
actcacgaga atgtgaaatc tgttgatcaa cttttatctc acgatttaat atataatggt 240
tcagggccaa attatgataa attaaaaaact gaacttaaga accaagagat ggcaacttta 300
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tatataaagt tcatacctaa gaataaagaa agtttttggt ttgatttttt ccctgaacca 660
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<210> 994
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 994
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23

<210> 995
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
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<400> 995
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22

<210> 996
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 996
acaaatcatg aagggaatca tttag

25

<210> 997
<211> 23
<212> DNA
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<220>
<223> Description of Artificial Sequence:
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<400> 997
ctaattcttg agcagttacc att

23

<210> 998
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 998
ggaggggtaa caaatcatga agg

23

<210> 999
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 999
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23

<210> 1000
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1000
ttagtgtgtg gggtgattga act

23

<210> 1001
<211> 23

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
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<400> 1001
aagagttgct tgaattagtt gag

23

<210> 1002
<211> 894
<212> DNA
<213> Streptococcus pyogenes ATCC 700294

<400> 1002
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cttatcgtgt tcatgaacaa agttgacctt gttgatgacg aagagttgct tgaattagtt 180
gagatggaaa ttctgtacct tctttcagaa tacgatttcc cagggtgatga ccttccagtt 240
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gaattgatgg atactgttga ttcatacatt ccagaaccag aacgcgcacac tgacaaacca 360
ttgcttcttc cagtcgaaga cgtattctca attacaggtc gtggtacagt tgcttcagga 420
cgtatcgacc gtggtactgt tcgtgtcaac gacgaaatcg aaatcgttgg tatcaaagaa 480
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cttgaggag acaacgtagg tatecttctt cgtggtgttc aacgtgacga aatcgaacgt 600
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tatatccttt cttaaagacga aggtggacgt cacactccat tcttcaacaa ctaccgtcca 720
caattctact tccgtacaac tgacgtaaca gggtcaatcg aacttcagc aggtacagaa 780
atggttatgc ctggtgataa cgtgacaatc aacgttgagt tgatccacc aatcgccgta 840
gaacaaggta ctactttctc aatccgtgaa ggtggacgta ctggttggtc aggt 894

<210> 1003
<211> 332
<212> DNA
<213> Bacillus cereus ATCC 14579

<400> 1003
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gcctgataca ggggagcaag gattagaaat cgcggaagca cttgtacgaa gtggtgcggt 120
tgacattatc gtaattgact ctgtagcagc tcttgtagcg aaagcagaga ttgaaggcga 180
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<210> 1004
<211> 1212
<212> DNA
<213> Streptococcus pneumoniae strain StrR-01

<400> 1004
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ctgacgatga tttgcaagtc gcattctacg tcgtagatgt ttcaaatggg aaagtcacgc 120
cccaacttgg agctcgtcac caagcaagta acgtttcatt tggtagcaac caagctgtgg 180
aaaccaatcg tgactggggg tctgctatga aaccaatcac cgattatgca cctgccatag 240
aatacgggtg ttatgattcc actgcaacta tgggttaatga tattccttat aactatccgg 300
gaacaagcac acctgtctac aactgggata gagcatatct cggtaatatc actctgcaat 360
atgctcttca acaatcacga aatgtcacag ccgttgagac tccaagcatg cattatgcaa 480
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tggtgctgctg ttatgctgcc tttgcaaatg gtggcactta ctataaacca actcgtgcca 660
ataaagtcgt cttcagtgat ggaagtaaaa aagagttctc taatgtcgga actcgtgcca 720
tgaaggaaac gacagcctat atgatgaccg acatgatgaa aacagtcctg acttatggaa

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ctgggcggtgg agcctatctt ccttggcttc ctcaagctgg taaaacagga acctctaact 780
atacagatga ggaagttgaa aaccacatca agaacactgg ctatgtagct ccagatgaaa 840
tggttgggtgg ttatactcgt aagtattcta tggctgtatg gacagggtat tcgaatcggt 900
taactcctat cgttggagat ggtttcctag ttgcagctaa agtttatcgc tcaatgataa 960
cgtatctatc agaagatact catccagaag actggacgat gccagacgga cttttcagaa 1020
acggggaatt tgtattcaaa aatggagctc gcccaatatg gactgaaccc tctactcaac 1080
aatcctcaac agctgaaagt tcaagctcat catcagatag ttcaacttca cagtctagct 1140
caaccactcc aagcacaat aatagtagca ctaccaatcc taacaataat acgcaacaat 1200
caaatacaac cc

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<210> 1005
 <211> 1212
 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-02

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<400> 1005
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ttggagctcg tcaccaagca agtaacgttt catttggtag caaccaagct gtggaaacca 180
atcgtgactg ggggttctgct atgaaaccaa tcaccgatta tgcacctgcc atagaatacg 240
gtgtttatga ttccactgca actatgggta atgatattcc ttataactat ccgggaacaa 300
gcacacctgt ctacaactgg gatagagcat atttcggtaa tattactctg caatatgctc 360
ttcaacaatc acgaaatgtc acagccgttg agactttgaa taaggctcgt ctatgaaag 420
ctaaaacctt ccttaatggt cttgggtatcg actatccaag catgcattat gcaaacgcca 480
tttcaagtaa tacaacagaa tctaataaac aatacggagc aagtagtgaa aaaatggctg 540
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tcgtcttcag tgacggtagt aaaaaagaat tttcagatgt aggtacacga gctatgaaag 660
aaacaactgc ttacatgatg accgaaatga tgaaaactgt aggtacttct aactacacag 780
gtggagccta tctcccatgg ttagcgcaag ctggtaagac aggtacttct gaaatgtttg 840
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<210> 1006
 <211> 1213
 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-03

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<400> 1006
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cccaacttgg agctcgtcac caagcaagta acgtttcatt tggtagcaac caagctgtgg 180
aaaccaatcg tgactgggtg tctgctatga aaccaatcac cgattatgca cctgccatag 240
aatacgggtg ttatgattcc actgcaacta tggttaatga tattccttat aactatccgg 300
gaacaagcac acctgtctac aactgggata gagcatattt cggtaatat actctgcaat 360
atgctcttca acaatcacga aatgtcacag ccgttgagac tttgaataag gtcgggtctag 420
atagagctaa aaccttcctt aatgggtctg gtatcgacta tccaagcatg cattatgcaa 480
acgccatttc aagtaataca acagaatcta ataaacaata cggagcaagt agtgaaaaaa 540
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ctggctcgtg agcttatctc ccatgggttag cgcaagctgg taagacaggt acttctaact 780
acacagatga tgaaattgaa aaacacatca agaacactgg ctatgtagct ccagatgaaa 840
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atggagaatt cgtattttaa aatgggtgctc gttctacgtg gagctcacct cagtctaact 1140
aaccctcatc aactgaaagt tcaagctcat catcagatag taacaataat acgcaacaat 1200
caaccactcc aagcacaat aatagtagca ctaccaatcc

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caaatacaac ccc

<210> 1007
<211> 1218
<212> DNA
<213> Streptococcus pneumoniae strain StrR-04

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<400> 1007
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ctgacgatga tttgcaagtc gcatctacgg tctagatgt ttcaaagggt aaagtcacgc 120
cccaacttgg agctcgtcac caagcaagta acggttcatt tggtagcaac caagctgtgg 180
aaaccaatcg tgactggggg tctgctatga aaccaatcac cgattatgca cctgccatag 240
aatacgggtgt ttatgattcc actgcaacta tgggtaaatga tttccttat aactatccgg 300
gaacaagcac acctgtctac aactgggata gagcatattt cggtaaatatt actctgcaat 360
atgctcttca acaatcacga aatgtcacag ccgttgagac tttgaataag gtcgggtctag 420
atagagctaa aaccttcctt aatgggtctg gtatcgacta tccaagcatg cattatgcaa 480
acgccatttc aagtaataca acagaatcta ataaacaata cggagcaagt agtgaaaaaa 540
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aatcctcaac agctgaaagt tcaagctcat catcagatag ttcaacttca cagtctagct 1140
caaccactcc aagcacaaat aatagtacga ctaccaatcc taacaataat acgcaacaat 1200
caaatacaac ccctgatc

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<210> 1008
<211> 1223
<212> DNA
<213> Streptococcus pneumoniae strain StrR-05

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<400> 1008
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taccctgacg atgatttgca agtcgcatct acggctcgtag atgtttcaaa tggtaaagtc 120
atcgcccaac ttggagctcg tcaccaagca agtaacgttt catttggtac caaccaagct 180
gtggaaacca atcgtgactg gggttctgct atgaaaccaa atgatattcc ttataactat 240
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ccgggaacaa gcacacctgt ctacaactgg gatagagcat atttcggtaa tattactctg 360
caatatgctc ttcaacaatc acgaaatgtc acagccgttg agactttgaa taaggctcgg 420
ctagatagag ctaaaacctt ccttaatggg cttgggtatcg actatccaag catgcattat 480
gcaaacgcca tttcaagtaa tacaacagaa tctaataaac aatacggagc aagtagtgaa 540
aaaatggctg ctgcttatgc tgcctttgca aatgggtggc cttactataa accaatgtat 600
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gccatgaagg aaacgacagc ctatatgatg accgacatga tgaaaacagt cttgacttat 720
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caatcaaata caaccctga tca

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<210> 1009
<211> 1214
<212> DNA
<213> Streptococcus pneumoniae strain StrR-06

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<400> 1009
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cccaacttgg agctcgtcac caagcaagta acgtttcatt tggtagcaac caagctgtgg 180
aaaccaatcg tgactggggg tctgctatga aaccaatcac cgattatgca cctgccatag 240
aatacgggtg ttatgattcc actgcaacta tggttaatga tttccttat aactatccgg 300
gaacaagcac acctgtctac aactgggata gagcatatgt cggtaatatt actctgcaat 360
atgctcttca acaatcacga aatgtcacag cgttgagac tttgaataag gtcgggtctag 420
atagagctaa aaccttcctt aatggctctg gtatcgacta tccaagcatg cattatgcaa 480
acgccatttc aagtaataca acagaatcta ataaacaata cggagcaagt agtgaaaaaa 540
tggctgctgc ttatgctgcc tttgcaaagt gtggcactta ctataaacca atgtatatcc 600
ataaagtcgt cttcagtgat ggaagtaaaa aagagttctc taatgtcgga actcgtgcca 660
tgaaggaaac gacagcctat atgatgaccg acatgatgaa aacagtcctg acttatggaa 720
ctgggcgtgg agcctatctt ccttggcttc ctcaagctgg taaaacagga acctctaact 780
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acggggaatt tgtattcaaa aatggagctc gcccaatatg gactgaaccc tctactcaac 1080
aatcctcaac agctgaaagt tcaagctcat catcagatag ttcaacttca cagtctagct 1140
caaccactcc aagcacaat aatagtacga ctaccaatcc taacaataat acgcaacaat 1200
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<210> 1010
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<212> DNA
<213> Streptococcus pneumoniae strain StrR-07

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<400> 1010
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acaacttggg gctcgtcatc aagcaagtaa tgtttcattc ggtaccaacc aggccttaga 180
aaccaatcgt gactgggggat catcaatgaa accaatcact gactatgctc ccgcttttaga 240
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cactgatact ccactctaca actgggatca tgtctacttt ggaaacatta caatccagta 360
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taaaatcgtc tttagtgatg gtagegaaaa agaattttct gatgctggta cacgagctat 660
gaaagagact actgcctata tgatgactga aatgatgaaa actgttttaa cttacggaac 720
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<210> 1011
<211> 1207
<212> DNA
<213> Streptococcus pneumoniae strain StrR-08

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<400> 1011
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ttggagctcg tcaccaagca agtaacgttt catttggtag caaccaagct atggaaacca 180
atcgtgactg ggggttctgct atgaaaccaa tcaccgatta tgcacctgcc atagaatacg 240
gtgtttatga ttccactgca actatgggta atgatattcc ttataactat ccgggaacaa 300
gcacacctgt ctacaactgg gatagagcat atttcggtaa tattactctg caatatgctc 360
ttcaacaatc acgaaatgct acagccggtg agactttgaa taaggctcgg ctagatagag 420

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ctaaaacctt	ccttaatggt	cttgggtatcg	actatccaag	catgcattat	gcaaacgcca	480
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aattttgtatt	caaaaatgga	gctcgcccaa	tatggactga	accctctact	caacaatcct	1080
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caacccc						1207

<210> 1012

<211> 1201

<212> DNA

<213> Streptococcus pneumoniae strain StrR-09

<400> 1012

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ttggagctcg	tcaccaagca	agtaacgttt	catttggtag	caaccaagct	gtggaaacca	180
atcgtgactg	gggttctgct	atgaaaccaa	tcaccgatta	tgacactgcc	atagaatacg	240
gtgtttatga	ttccactgca	actatgggta	atgatattcc	ttataactat	ccgggaacaa	300
gcacacctgt	ctacaactgg	gatagagcat	atttcggtaa	tattactctg	caatatgctc	360
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<211> 1220

<212> DNA

<213> Streptococcus pneumoniae strain StrR-10

<400> 1013

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<211> 1199

<212> DNA

<213> *Streptococcus pneumoniae* strain StrR-11

<400> 1014

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<210> 1015

<211> 1211

<212> DNA

<213> *Streptococcus pneumoniae* strain StrR-12

<400> 1015

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<210> 1016

<211> 1222

<212> DNA

<213> Streptococcus pneumoniae strain StrR-13

<400> 1016

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<211> 1229

<212> DNA

<213> Streptococcus pneumoniae strain StrR-14

<400> 1017

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<210> 1018

<211> 1225

<212> DNA

<213> Streptococcus pneumoniae strain StrR-15

<400> 1018

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<210> 1019

<211> 1439

<212> DNA

<213> Streptococcus pneumoniae strain StrR-01

<400> 1019

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<210> 1020

<211> 1441

<212> DNA

<213> Streptococcus pneumoniae strain StrR-02

<400> 1020

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<210> 1021
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 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-03

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<210> 1022
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 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-04

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<213> Streptococcus pneumoniae strain StrR-05

<400> 1023

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<212> DNA

<213> Streptococcus pneumoniae strain StrR-06

<400> 1024

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 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-07

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 <213> Streptococcus pneumoniae strain StrR-08

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<212> DNA
<213> Streptococcus pneumoniae strain StrR-09

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<210> 1028
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<212> DNA
<213> Streptococcus pneumoniae strain StrR-10

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<210> 1029

<211> 1423

<212> DNA

<213> Streptococcus pneumoniae strain StrR-11

<400> 1029

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<210> 1030

<211> 1447

<212> DNA

<213> Streptococcus pneumoniae strain StrR-12

<400> 1030

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<210> 1031
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 <212> DNA
 <213> Streptococcus pneumoniae strain StrR-13

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<210> 1035

<211> 1683

<212> DNA

<213> Streptococcus pneumoniae strain StrR-02

<400> 1035

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<211> 1682

<212> DNA

<213> Streptococcus pneumoniae strain StrR-03

<400> 1036

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<212> DNA
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<212> DNA
<213> Streptococcus pneumoniae strain StrR-06

<400> 1039
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<210> 1040

<211> 1685

<212> DNA

<213> Streptococcus pneumoniae strain StrR-07

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<211> 1696

<212> DNA

<213> Streptococcus pneumoniae strain StrR-08

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 <213> Streptococcus pneumoniae strain StrR-09

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 <213> Streptococcus pneumoniae strain StrR-10

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 <213> Streptococcus pneumoniae strain StrR-11

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 <213> Streptococcus pneumoniae strain StrR-12

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<211> 1689

<212> DNA

<213> Streptococcus pneumoniae strain StrR-13

<400> 1046

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<210> 1047

<211> 1690

<212> DNA

<213> Streptococcus pneumoniae strain StrR-14

<400> 1047

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tgcagatgtc acgattcgag attgggacgt caatgaagga ttgactgggt gcagaatgat 660
gaccttttct caaggggttcg ctactcaag taacgttggg atgacgcttc ttgagcaaaa 720
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tcttctctta tctgataaag cagaggaagt tccagatatg tatggttgga caaaagagac 1620
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tgtgcagaag                                     1690
```

<210> 1048

<211> 1682

<212> DNA

<213> Streptococcus pneumoniae strain StrR-15

<400> 1048

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ggatggtagt aagagttttg tagggacttc tggtttgag agttctttta ataccattct 180
tgctgggaca gacggtatta ttacctatga aaaagaccgt gtaggaaata tcgtaccagg 240
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tccgctacaa tctttcatgg aaactcagat ggatgccttt ctagaaaaag taaaaggtaa 360
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tgagtggcgg gaagccttac gccgaaatat tgtgcaacca atcggtgtag gtactggaac 1500
```



```

aaagattaaa gagacttctg tagaagaagg gaccaatctt gcaccaaacc aacaagttct 1560
ccttttatcg gataaggtag aagaaattcc agacatgtat ggctggaaaa aagagactgc 1620
tgaaaccttt gctaaatggg tggatattga gttggaattt gaaggttcag gttccgctcg 1680
tc 1682

```

<210> 1049
 <211> 1241
 <212> DNA
 <213> *Enterococcus faecium* strain R690

```

<400> 1049
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cgtatcggtg aaatctgcaa tagagatagc cgctaacatt aataaagaaa aatacagagcc 180
gttatacatt ggaattacga aatctgggtg atggaaaaatg tgcgaaaaac cttgcgcgga 240
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acttgttaaa aagaaccatg aatatgaaat caaccatgtt gatgtagcat tttcagcttt 360
gcatggcaag tcagggtgaag atggatccat acaaggctctg tttgaattgt ccggtatccc 420
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cgttgcgaaa aatgctggga tagctactcc cgccttttgg gttattaata aagatgatag 540
gccggtggca gctacgttta cctatcctgt tttgttaaag ccggcgcggt caggctcatc 600
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acaatatgac agcaaaatct taattgagca ggctgtttcg ggctgtgagg tcggttgtgc 720
ggtattggga aacagtgccg cgtagctgtg tggcgagggtg gaccaaatac ggctgcagta 780
cggaatcttt cgtattcatc aggaagtcca gccgaaaaaa ggctctgaaa acgcagttat 840
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attagcgtaa aaggggtgat aagcatggaa ataggattta cttttttaga tgaaatagta 1140
cacggtgttc gttgggacgc taaatatgcc acttgggata atttcaccgg aaaaccggtt 1200
gacggttatg aagtaaatcg cattgtaggg acatacgaat t 1241

```

<210> 1050
 <211> 1249
 <212> DNA
 <213> *Enterococcus gallinarum* strain R691

```

<400> 1050
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ctgtttgggg gttgctcaga ggagcatgac gtatcggtaa aatctgcaat agagatagcc 180
gctaacatta ataaagaaaa atacgagccg ttatacattg gaattacgaa atctgggtga 240
tggaaaaatgt gcgaaaaaac ttgcgcggaa tgggaaaaacg acaattgcta ttcagctgta 300
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aaccatgttg atgtagcatt ttcagctttg catggcaagt cagggtgaaga tggatccata 420
caaggctctg ttgaattgtc cggtatccct tttgtaggct gcgatattca aagctcagca 480
atattgtatg acaaatcggt gacatacatc gttgcgaaaa atgctgggat agctactccc 540
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```

<210> 1051
 <211> 1272

<212> DNA

<213> Enterococcus faecium strain R481

<400> 1051

```
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gcacggatta cttgttaaaa agaaccatga atatgaaatc aaccatgttg atgtagcatt 360
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cggatatccct tttgtaggct gcgatattca aagctcagca atttgtatgg acaaatcggt 480
gacatacatc gttgcgaaaa atgctgggat agctactccc gccttttggg ttattaataa 540
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gaaatagtac acggtgttcg ttgggacgct aaatatgcca cttgggataa tttcaccgga 1200
aaaccggttg acggttatga agtaaatcgc attgtagggg catacgaatt ggcttgaatc 1260
gctttttgaa gg                                     1272
```

<210> 1052

<211> 1237

<212> DNA

<213> Enterococcus faecium strain R492

<400> 1052

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aaccatgttg atgtagcatt ttcagctttg catggcaagt caggtgaaga tggatccata 420
caaggtctgt ttgaattgtc cggatatccct tttgtaggct gcgatattca aagctcagca 480
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taggatttac ttttttagat gaaatagtac acggtgttcg ttgggacgct aaatatgcca 1200
cttgggataa tttcaccgga aaaccggttg acggtta                                     1237
```

<210> 1053

<211> 1263

<212> DNA

<213> Enterococcus faecium strain R581

<400> 1053

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gggttgctca gaggagcatg acgtatcggg aaaatctgca atagagatag ccgctaacat 180
```

```
taataaagaa aaatacgagc cgttatacat tgggaattacg aaatctggtg tatggaaaaat 240
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ggataaaaaa atgcacggat tacttggttaa aaagaaccat gaatatgaaa tcaaccatgt 360
tgatgtagca ttttcagctt tgcattggcaa gtcagggtgaa gatggatcca tacaagggtct 420
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aattttaccg gaaaaccggt tgacgggtat gaaagtaaat cgcattgtag ggacattcga 1260
att 1263
```

<210> 1054
<211> 1232
<212> DNA
<213> Enterococcus faecalis R610

<220>
<221> misc_feature
<222> (12)..(12)
<223> n represents any nucleotide

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<400> 1054
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aaagaaaaat acgagccggt atacattgga attacgaaat ctggtgtatg gaaaatgtgc 240
gaaaaaacctt gcgcggaatg ggaaaaacgac aattgctatt cagctgtact ctgcgccgat 300
aaaaaaatgc acggattact tgttaaaaag aaccatgaat atgaaatcaa ccatgttgat 360
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attgaccgct tgatcgattt agcgttaaag ggggtgataag catggaaata ggatttactt 1140
tttttagatga aatagtacac ggtgttcggt gggacgctaa atatgccact tgggataatt 1200
tcaccggaaa accggttgac ggttataagt aa 1232
```

<210> 1055
<211> 1218
<212> DNA
<213> Enterococcus gallinarum strain R684

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aaggagacag gagcatgaat agaataaaaag ttgcaatact gtttgggggt tgctcagagg 120
agcatgacgt atcggtaaaa tctgcaatag agatagccgc taacattaat aaagaaaaat 180
acgagccggt atacattgga attacgaaat ctggtgtatg gaaaatgtgc gaaaaacctt 240
gcgcggaatg ggaaaaacgac aattgctatt cagctgtact ctgcgccgat aaaaaaatgc 300
```

```

acggattact tgttaaaaag aaccatgaat atgaaatcaa ccatgttgat gtagcatttt 360
cagcttttgca tggcaagtca ggtgaagatg gatccataca aggtctgttt gaattgtccg 420
gtatcccttt tgtaggctgc gatattcaaa gctcagcaat ttgtatggac aaatcgttga 480
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tgatcgtatt agcgttaaag ggggtgataag catggaaata ggatttactt ttttagatga 1140
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```

<210> 1056

<211> 1265

<212> DNA

<213> *Enterococcus faecium* strain R688

<400> 1056

```

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tactgttttg ggttgctca gaggagcatg acgtatcggg aaaatctgca atagagatag 180
ccgctaaccat taataaagaa aaatacagagc cgttatacat tgggaattacg aaatctggtg 240
tatggaaaat gtgcgaaaaa ccttgccgagc aatgggaaaa cgacaattgc tattcagctg 300
tactctcgcc ggataaaaaa atgcacggat tacttgtaa aaagaacat gaatatgaaa 360
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cacttcccga actgattgac cgcttgatcg tattagcgtt aaaggggtga taagcatgga 1140
aataggattt acttttttag atgaaatagt acacggtgtt cgttgggacg ctaaatatgc 1200
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gacat 1265

```

<210> 1057

<211> 1269

<212> DNA

<213> *Enterococcus flavescens* strain R689

<400> 1057

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tcacaccgca tacggcctat tataccgagc aagcgttgcg tgataccgtt gaaaaaacca 60
ttaaaaaactg tttggatttt gaaaggagac aggagcatga atagaataaa agttgcaata 120
ctgtttgggg gttgctcaga ggagcatgac gtatcggtaa aatctgcaat agagatagcc 180
gctaaccatta ataaagaaaa atacgagccg ttatacattg gaattacgaa atctggtgta 240
tgaaaaatgt gcgaaaaacc ttgcgcggaa tgggaaaaacg acaattgcta ttcagctgta 300
ctctcgccgg ataaaaaaat gcacggatta cttgttaaaa agaaccatga atatgaaatc 360
aaccatgttg atgtagcatt ttcagctttg catggcaagt caggtgaaga tggatccata 420
caaggtctgt ttgaattgtc cggatccctt tttgtaggct gcgatattca aagctcagca 480
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gcctttttgg ttattataaa agatgatagg ccgggtggcag ctacgtttac ctatcctggt 600
tttggttaagc cggcgcggtt aggtcatcc ttcgggtgtg aaaaagtcaa tagcgcggac 660
gaattggact acgcaattga atcggcaaga caatatgaca gcaaaatctt aattgagcag 720

```

```
gctgttttcgg gctgtgaggt cggttgtgcg gtattgggaa acagtgccgc gttagctgtt 780
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catacgaat 1269
```

<210> 1058

<211> 1169

<212> DNA

<213> Enterococcus gallinarum strain R420

<400> 1058

```
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tactaacct cagcagcaag tgtgatccaa gctattaacc cgctgaaata tgaagtaatg 180
accattggca tcgcaccaac aatggattgg tattgggtatc aaggaaacct cgcgaaatgtt 240
cgcaatgata cttggctaga agatcacaaa aactgtcacc agctgacttt ttctagccaa 300
ggattttatat taggagaaaa acgaatcgtc cctgatgtcc tctttccagt cttgcatggg 360
aagtatggcg aggatggctg tatccaagga ctgcttgaa taatgaacct gccttatgtt 420
ggttgccatg tcgctgcctc cgcattatgt atgaacaaat ggctcttgca tcaacttgct 480
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gccacaatcg atcgttttat tcaagaccat ggattcccga tctttatcaa gccgaatgaa 600
gcccgttctt caaaagggat cacaaaagta actgacaaaa cagcgctcca atctgcatta 660
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cttgctgacg gtttttttga ttttgaagag aaataccaat taatcagcgc cagcatcact 840
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gcgattttatt taaacgaaat caacaccatg cgggatttta ctgggcactc ccgctaccca 1020
gctatgatgg cggaagtcgg gttatcctac gaaatattag tagagcaatt gattgcactg 1080
gcagaggagg acaaacgatg aacacattac aattgatcaa taaaaccat ccattgaaaa 1140
aaaatcaaga gccccgcac ttagtgcta 1169
```

<210> 1059

<211> 1166

<212> DNA

<213> Enterococcus gallinarum strain R631

<400> 1059

```
caaattttct tttcttttcc taggtacact gaatgtaacc ttaaaagaaa aaaggaaagg 60
aagaaaaatga tgaaaaaaat tgccgtttta tttggaggga attctccaga atactcagtg 120
tactagcct cagcagcaag tgtgatccaa gctattgacc cgctgaaata tgaagtaatg 180
accattggca tcgcaccaac aatggattgg tattgggtatc aaggaaacct cgcgaaatgtt 240
cgcaatgata cttggctaga agatcacaaa aactgtcacc agctgacttt ttctagccaa 300
ggattttatat taggagaaaa acgaatcgtc cctgatgtcc tctttccagt cttgcatggg 360
aagtatggcg aggatggctg tatccaagga ctgcttgaa taatgaacct gccttatgtt 420
ggttgccatg tcgctgcctc cgcattatgt atgaacaaat ggctcttgca tcaacttgct 480
gataccatgg gaatcgctag tgctcccat ttgcttttat cccgctatga aaacgatcct 540
gccacaatcg atcgttttat tcaagaccat ggattcccga tctttatcaa gccgaatgaa 600
gcccgttctt caaaagggat cacaaaagta actgacaaaa cagcgctcca atctgcatta 660
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cttgctgacg gtttttttga ttttgaagag aaataccaat taatcagcgc cagcatcact 840
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tatcgaaact tgggattgac gggctctggct cgaatcgatt ttttcgtcac caatcaagga 960
gcgattttatt taaacgaaat caacaccatg cgggatttta ctgggcactc ccgctaccca 1020
gctatgatgg cggaagtcgg gttatcctac gaaatattag tagagcaatt gattgcactg 1080
gcagaggagg acaaacgatg aacacattac aattgatcaa taaaaccat ccattgaaaa 1140
aaaatcaaga gccccgcac ttagtg 1166
```

<210> 1060
 <211> 1028
 <212> DNA
 <213> *Enterococcus casseliflavus* ATCC 25788

```
<400> 1060
aacatgaaaa aaatcgccctt atttttggag gcaattcacc ggaatacacc gtttcttttag 60
cttcagcaac tagcgcaatc gaagcactcc aatcatctcc ctatgactac gacctctctt 120
tgatcgggat cgccccagat gctatggatt ggtacttgta tacaggagaa ctggaaaaaca 180
tccgacaaga cacgtgggtt ttggatacga aacataaaca gaaaatacag ccgctatttcg 240
aaggaaacgg cttttggcta agtgaagagc agcaaacggt ggtacctgat gttttatttc 300
ccattatgca tggcaaatac ggggaagatg gcagtatcca aggattgttt gaattgatga 360
agctgcctta tgtaggctgc ggggtggcag gttctgcctt atgtatgaac aaatggctgc 420
tgcataaagc tgcagcagcc attggcgctac aaagtgtccc tacgattctc ttgacaaatc 480
aagccaacca gcaagaacaa atcgaagcctt ttatccagac ccattggcttc ccagttttct 540
ttaagcctaa tgaagcgggc tcctcaaaag ggatcactaa agtcacctgc gttgaagaaa 600
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gcgcaaaat caccgtccct gcgccattgc ctgaaacgat tgaaaccaag gtcaaagaac 840
aagctcagct gctctatcgt agtcttggtc ttaaaggctt tgctcgcatc gacttttttg 900
tcacggagcg aggagaacta tacttgaatg aaatcaatac tatgccgggc tttacgagtc 960
actccgcta tcctgccatg atggcagcgg tcggcttata ctatcaagaa ctactacaaa 1020
aactgctt                                     1028
```

<210> 1061
 <211> 1030
 <212> DNA
 <213> *Enterococcus casseliflavus* strain R689

```
<400> 1061
aatatgaaaa aaatcgccctt atttttggag gcaattcacc ggagtacgcc gtttcttttag 60
cctcagcaac tagcgcaatc gaagcactcc aatcatctcc cgatgactat gacctctctt 120
tgatcgggat cgccccagat gctatggatt ggtatttgta tacaggagaa ctggaaaaaca 180
tccgacaaga cacgtgggtt ttggatacga aacataaaca gaaaatccag ccgctttttg 240
aaggaaacgg cttttggcta agtgaagagc aacaaacggt ggttcctgat gttttatttc 300
ccattatgca tggcaaatac ggggaagatg gcagtatcca aggattgttt gaattgatga 360
aactacctta tgtaggctgc ggggtggcag cctctgcctt atgtatgaac aaatggctgc 420
tgcataaagc agcagaagcg attggcgctac aaagtgtccc tacgattctc ttgacaaatc 480
aagccaacca gcaagatcaa atcgaagcctt ttatccagac ccattggcttc ccggtttttt 540
ttaagcctaa tgaagcgggc tcctcaaaag ggatcactaa agtcacctgc gttgaagaaa 600
tcgcttctgc cttaaaagaa gcctttactt attgttcagc agtgctccta caaaaaata 660
ttgccgggtg tgagatcggt tgcgggtattt tgggcaacga ctctttgact gtcggtgctt 720
gtgacgcat ttcattagta gacggctttt tcgattttga agaaaagtac cagctgatca 780
gcgccaagat caccgttcct gcaccattgc ctgaaacgat tgaaaccaag gtcaaagaac 840
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tcacggatca aggagaacta tacttgaatg aaatcaatac tatgccgggc tttacgagtc 960
actccgcta tcctgccatg atggcagcga tcggcttata ctatcaagaa ctactacaaa 1020
aactgctt                                     1030
```

<210> 1062
 <211> 1031
 <212> DNA
 <213> *Enterococcus casseliflavus* strain R754

```
<400> 1062
aaacatgaaa aaaatcgcca ttattttttg aggcaattca ccggaatata ccgtttcttt 60
agcttcagca actagcgcaa tcgaagcact ccaatcatct ccctatgact acgacctctc 120
tttgatcggg atcgccccag atgctatgga ttggtagctt tatacaggag aactggaaaa 180
catccgacaa gacacgtggg tgttggtatc gaaacataaa cagaaaatac agccgctatt 240
cgaaggaaac ggccttttggc taagtgaaga gcagcaaacg ttggtacctg atgttttatt 300
tcccattatg catggcaaat acgggggaaga tggcagtatc caaggattgt ttgaattgat 360
gaagctgctt tatgtaggct gcgggggtggc aggttctgct ttatgtatga acaaatggct 420
```

```

gctgcatcaa gctgcagcag ccattggcgt acaaagtgtc cctacgattc tcttgacaaa 480
tcaagccaac cagcaagaac aaatcgaagc ttttatccag acccatggct tcccagtttt 540
ctttaagcct aatgaagcgg gctcctcaaa agggatcact aaagtcacct gcgttgaaga 600
aatcgcttct gccttaaaag aagcctttac ttattgttcc gcagtgtctc tacaaaaaaa 660
tattgccggg gttgagatcg gttgcgggtat tttgggcaac gactctttga ctgtcgggtc 720
ttgtgacgcc atttcattag tagacggctt tttcgatttt gaagaaaagt accagctgat 780
cagcgccaaa atcaccgctc ctgcgccatt gcctgaaacg attgaaacca aggtcaaaga 840
acaagctcag ctgctctatc gtagtcttgg tcttaaaggt cttgctcgca tcgacttttt 900
tgtcacggag cgaggagaac tatacttgaa tgaaatcaat actatgccgg gctttacgag 960
tcactccgcg tatcctgcca tgatggcagc ggtcggctta tcctatcaag aactactaca 1020
aaaactgctt g                                     1031

```

<210> 1063

<211> 1030

<212> DNA

<213> *Enterococcus casseliflavus* strain R775

<400> 1063

```

aacatgaaaa aaatcgccat tatttttggg ggcaattcac cggaatacac cgttttcttta 60
gcttcagcaa ctagcgcaat cgaagcactc caatcatctc cctatgacta cgacctctct 120
ttgatcggga tcgccccaga tgctatggat tgggtacttg atacaggaga actggaaaaa 180
atccgacaag acacgtgggt gttggatacg aaacataaac agaaaataca gccgctattt 240
gaaggaaacg gcttttggct aagtgaagag cagcaaacgt tagtacctga tattttattt 300
cccattatgc atggcaaata cggggaagat ggcagtatcc aaggattgtt tgaattgatg 360
aaactacctt atgtagggtg cgggggtggc ggttctgctc tatgtatgaa caaatggctg 420
ctgcatcaag ctgcagcagc cattggcgta caaagtgtc ctacgattct cttgacaaat 480
caagccaacc agcaagaaca aatcgaagct tttatccaga cccatggctt cccagttttc 540
tttaagccta atgaagcggg ctcttcaaaa gggatcacta aagtcacctg cgttgaagaa 600
atcgcttctg ccttaaaaaa agcctttact tattgttccg cagtgtcctc acaaaaaaat 660
attgccgggtg ttgagatcgg ttgcgggtat ttgggcaacg actccttgac tgtcgggtgt 720
tgtgacgcca ttctattagt agacggcttt ttcgattttg aagaaaagta ccagctgatc 780
agcgccaaaa tcaccgtccc tgcgccattg cctgaaacga ttgaaaccaa ggtcaaagaa 840
caagctcagc tgctctatcg tagtcttggg cttaaagggtc ttgctcgcat cgactttttt 900
gtcacgggatc aaggagaact atacttgaat gaaatcaata ctatgccggg ctttacgagt 960
cactcccggt atcctgccat gatggcagcg gtcggcttat cctatcaaga actactacaa 1020
aaactgcttg                                     1030

```

<210> 1064

<211> 1032

<212> DNA

<213> *Enterococcus flavescens* ATCC 49996

<400> 1064

```

aaacatgaaa aaaatcgcca ttatttttgg aggcaattca ccggaatata ccgttttcttt 60
agcttcagca actagcgcaa tcgaagcact ccaatcatct ccctatgact acgacctctc 120
tttgatcggg atcgccccag atgctatgga ttgggtactg tatacaggag aactggaaaa 180
catccgacaa gacacgtggg tggtggatac gaaacagaaa cagaaaatac agccgctatt 240
cgaaggaaac ggcttttggg taagtgaaga gcagcaaacg ttggtacctg atgttttatt 300
tcccattatg catggcaaat acggggaaga tggcagtatc caaggattgt ttgaattgat 360
gaagctacct tatgtaggct gcgggggtggc aggttctgcc ttatgtatga acaaatgggt 420
gctgcatcaa gctgcagcag ccattggcgt acaaagtgtc cctacgattc tcttgacaaa 480
tcacgccaac cagcaagaac aaatcgaagc ttttatccag acccatggct ttcagttttt 540
ctttaagcct aatgaagcgg gtctcctcaa agggatcact aaagtcacct gcgttgaaga 600
aatcgcttct gccttaaaag aagcctttac ttattgttcc gcagtgtctc tacaaaaaaa 660
tattgccggg gttgagatcg gttgcgggtat tttgggcaac gactctttga ctgtcgggtc 720
ttgtgacgcc atttcattag tagacggctt tttcgatttt gaagaaaagt accagctgat 780
cagcgccaaa atcaccgctc ctgcgccatt gcctgaaacg attgaaacta aggtcaaaga 840
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tgtcacggat caaggagaac tatacttgaa tgaaatcaat actatgccgg gctttacgag 960
tcactccgcg tatcctgcca tgatggcagc ggtcgggtta tcctatcaag aactactaca 1020
aaaactactt gt                                     1032

```

<210> 1065

<211> 1034
<212> DNA
<213> *Enterococcus flavescens* strain R758

<400> 1065
aaaaacatga aaaaaaatcgc cattatTTTTT ggaggcaatt caccggaata caccgtttct 60
ttagcttcag caactagcgc aatcgaagca ctccaatcat ctccctatga ctacgacctc 120
tctttgatcg ggatcgcccc agatgctatg gattggtagt tgtatacagg agaactggaa 180
aacatccgac aagacacgtg gttgttggtg acgaaacata aacagaaaat acagccgcta 240
ttcgaaggaa acggcttttg gctaagtgaag gagcagcaaa cgttggtacc tgatgtttta 300
tttcccatga tgcatggcaa atacggggaa gatggcagta tccaaggatt gtttgaattg 360
atgaagctgc cttatgtagg ctgcgggggtg gcaagttctg ccttatgtat gaacaaatgg 420
ctgctgcacg aagctgcagc agccattggc gtacaaaagt ctcctacgat tctcttgaca 480
aatcaagcca accagcaaga acaaatcgaa gcttttatcc agacccatgg ctttccagtt 540
ttctttaagc ctaatgaagc gggctcctca aaagggatca ctaaagtcac ctgctgtgaa 600
gaaatcgctt ctgccttaaa agaagccttt acttattggt cgcagtgct cctacaaaaa 660
aatattgccc gtgttgagat cggttgcggg attttgggca acgactcttt gactgtcggg 720
gcttgtgacg ccatttcatt agtagacggc tttttcgatt ttgaagaaaa gtaccagctg 780
atcagcgcca aaatcacctg ccctgcgcca ttgcctgaaa cgattgaaac caagggtcaa 840
gaacaagctc agctgctcta tcgtagtctt ggtctttaaag gtcttgctcg catcgacttt 900
tttgtcacgg atcaaggaga actatacttg aatgaaatca atactatgcc gggctttacg 960
agtcaactcc gctatcctgc catgatggca gcggtcgggt taccctatca agaactacta 1020
caaaaactgc ttgt 1034

<210> 1066
<211> 1012
<212> DNA
<213> *Enterococcus flavescens* strain R760

<400> 1066
catgaaaaaa atcgccatta tttttggagg caattcacccg gaatacacccg tttcttttagc 60
ctcagcaact agcgcaatcg aagcaactcca atcatctccc tatgattacg acctctcttt 120
gatcgggatc gccccagatg ctatggattg gtacttgtat acaggagaaac tggaaaacat 180
ccgacaagac acgtggttgt tggatacgaa acatacacag aaaatccagc cactttttga 240
aggaaacggc ttttggataa gtgaagcgca gcaaacggtg gtacctgatg ttttatttcc 300
cattatgcat ggtaaatacg gggaagatgg cagtatccaa ggattgtttg aattgatgaa 360
gtgccttat gtaggctgtg ggggtggcagc ctctgcctta tgtatgaaca aatggttatt 420
gcatcaagca gcagcagcga ttggcgtaca aagcgctcct acgattctct tgacaaatca 480
agccaaccag caaagacaaa tcgaagcctt tatccagacc catggctttc cagttttctt 540
taagcctaac gaagcgggct cctcaaaaagg gatcacaaaa gtaacttgtg ttgaagaaat 600
cgctcctgac ttgaaggaaag ccttcgctta ttgttccgca gtgctcttac aaaaaaatat 660
cgctggcggt gagattgggt gcggtatctt aggcaacgac tctttgactg tccgtgcttg 720
tgacgctatt tcattagtag acggcttttt cgattttgaa gaaaagtacc agttgatcag 780
cgccaaaatc accgttcctg cgccattgcc tgaacgatt gaaaccaaag tcaaagaaga 840
agctcagctg ctctatcaca gtcttggtct taaaggactt gctcgcacg acttttttgt 900
cacggatcaa ggagaactat acttgaatga aatcaatact atgccgggct ttacgagtc 960
ctcccgtat cctgccatga tggcagcggt cggcttatcc tatcaagaat ta 1012

<210> 1067
<211> 721
<212> DNA
<213> *Enterococcus faecium* strain R481

<220>
<221> misc_feature
<222> (27)..(27)
<223> n represents any nucleotide

<400> 1067
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ggatgaacgc tctcatcatg cggcaaatgg aatatcatgc aatgaagcgc aaaatcgagc 120
acgtttgcgc tccatcatgg aaaacagtgg gtttgaagca tatagcctg aatgggtggca 180
ctatgtatta agagacgaac cataccccaa tagctatttt gatttccccg ttaaataaac 240
ttttaaccgt tgcacggaca aactatataa gctaactctt tcggcaggaa acccgacgta 300

```

tgtaactgggt tcttagggaa tttatatata gtagatagta ttgaagatgt aaggcagagc 360
gatattgcgg tcattatctg cgtgcgctgc ggcaagatag cctgataata agactgatcg 420
catagagggg tgggtatttca caccgcccac tgtcaacagg cagttcagcc tcgttaaatt 480
cagcatgggt atcacttatg aaaattcatc tacattgggtg ataatagtaa atccagtagg 540
gcgaaataat tgactgtaat ttacggggcaca aaacggcaca atctcaaacg agattgtgcc 600
gtttaagggg aagattctag aaatatattca tacttccaac tatatagtta aggaggagac 660
tgaaaatgaa gaagttgttt tttttattgt tattgtttatt cttaatatat ttaggttatt 720
g

```

<210> 1068
 <211> 668
 <212> DNA
 <213> *Enterococcus faecium* strain R492

```

<400> 1068
atttttaagg atgaacgctc ttcattcatgc ggcaaattgga atatcatgca atgaagcgca 60
aatcgcgaga cgtttgcgct ccatcatgga aaacagtggg tttgaagcat atagcctcga 120
atgggtggcac tatgtattaa gagacgaacc ataccccaat agctattttg atttccccgt 180
taaataaaact tttaaccggt gcacggacaa actatataag ctaactcttt cggcaggaaa 240
cccgacgtat gtaactgggt cttaggggaat ttatatatag tagatagtat tgaagatgta 300
aggcagagcg atattgcggt cattatctgc gtgcgctgcg gcaagatagc ctgataataa 360
gactgatcgc atagaggggt ggtatttcac accgcccatt gtcaacaggc agttcagcct 420
cgttaaattc agcatgggta tcacttatga aaattcatct acattgggtga taatagtaaa 480
tccagtaggg cgaaataatt gactgtaatt tacggggcaa aacggcacaa tctcaaacga 540
gattgtgccg tttaagggga agattctaga aatatttcat acttccaact atatagttaa 600
ggaggagact gaaaatgaag aagttgtttt ttttattgtt attgttattc ttaatatact 660
taggttat

```

<210> 1069
 <211> 760
 <212> DNA
 <213> *Enterococcus faecium* strain R581

<220>
 <221> misc_feature
 <222> (755)..(755)
 <223> n represents any nucleotide

```

<400> 1069
cggcaagtgc cattgatctt acgctttatc gattagacac gggtragctt gtaccaatgg 60
gaagccgatt tgattttatg gatgaacgct ctcattcatgc ggcaaattgga atatcatgca 120
atgaagcgca aatcgcgaga cgtttgcgct ccatcatgga aaacagtggg tttgaagcat 180
atagcctcga atgggtggcac tatgtattaa gagacgaacc ataccccaat agctattttg 240
atttccccgt taaataaaact tttaaccggt gcacggacaa actatataag ctaactcttt 300
cggcaggaaa ccgacgtat gtaactgggt cttaggggaat ttatatatag tagatagtat 360
tgaagatgta aggcagagcg atattgcggt cattatctgc gtgcgctgcg gcaagatagc 420
ctgataataa gactgatcgc atagaggggt ggtatttcac accgcccatt gtcaacaggc 480
agttcagcct cgttaaattc agcatgggta tcacttatga aaattcatct acattgggtga 540
taatagtaaa tccagtaggg cgaaataatt gactgtaatt tacggggcaa aacggcacaa 600
tctcaaacga gattgtgccg tttaagggga agattctaga aatatttcat acttccaact 660
atatagttaa ggaggagact gaaaatgaag aagttgtttt ttttattgtt attgttattc 720
ttaatatact taggttatga ctacgttaat gaaancctga

```

<210> 1070
 <211> 801
 <212> DNA
 <213> *Enterococcus faecalis* strain R610

<220>
 <221> misc_feature
 <222> (127)..(127)
 <223> n represents any nucleotide


```
<400> 1070
aaaaggaata cggggcctttc aaaaatccaa gccataaccc gcggggcaagt gccatttgat 60
tcttacgctt taatcgatta gacacgggta agcttgtagc aatggggaac cgatttgatt 120
ttaatgnatg aacgctcttc atcatgcggc aaatggaata tcatgcaatg aagcgcaaaa 180
tcgcagacgt ttgcgctcca tcatggaaaa cagtggggtt gaagcatata gcctcgaatg 240
gtggcactat gtattaagag acgaaccata cccaatagc tatttttgatt tccccgttaa 300
ataaactttt aaccgttgca cggacaaact atataagcta actctttcgg caggaaaccc 360
gacgtatgta actggttctt aggggaattta tatatagtag atagtattga agatgtaagg 420
cagagcgata ttgcgggtcat tatctgcgtg cgctgcggca agatagcctg ataataagac 480
tgatcgcata gaggggtggt atttcacacc gcccatgtgc aacaggcagt tcagcctcgt 540
taaattcagc atgggtatca cttatgaaaa ttcatctaca ttggtgataa tagtaaattc 600
agtagggcga aataattgac tgtaatttac ggggcaaaac ggcacaatct caaacgagat 660
tgtgccgttt aagggggaaga ttctagaaat atttcatact tccaactata tagttaagga 720
ggagactgaa aatgaagaag ttgttttttt ttattgttat tgttattctt aatatactta 780
ggttatgact acgttaatga a 801
```

```
<210> 1071
<211> 711
<212> DNA
<213> Enterococcus gallinarum strain R684
```

```
<400> 1071
ttgtaccaat ggggagccga tttgatttta tggatgaacg ctctcatcat gcggcaaatg 60
gaatatcatg caatgaagcg caaaatcgca gacgtttgcg ctccatcatg gaaaacagtg 120
ggtttgaagc atatagcctc gaatgggtggc actatgtatt aagagacgaa ccatacccca 180
atagctatct tgatttcccc gttaaataaa cttttaaccg ttgcacggac aaactatata 240
agctaactct ttcggcagga aaccgcgagt atgtaactgg ttcttaggga atttatatat 300
agtagatagt attgaagatg taaggcagag cgatattgcg gtcattatct gcgtgcgctg 360
cggcaagata gcctgataat aagactgatc gcatagaggg gtgggtatttc acaccgccc 420
ttgtcaacag gcagttcagc ctctgtaaat tcagcatggg tatcacttat gaaaattcat 480
ctacattggg gataatagta aatccagtag ggcgaaataa ttgactgtaa tttacggggc 540
aaaacggcac aatctcaaac gagattgtgc cgtttaaggg gaagattcta gaaatatttc 600
atacttccaa ctatatagtt aaggaggaga ctgaaaatga agaagtgtgt ttttttattg 660
ttattgttat tcttaatat cttagggttat gactacgtta atgaagcact g 711
```

```
<210> 1072
<211> 751
<212> DNA
<213> Enterococcus faecium strain R688
```

```
<220>
<221> misc_feature
<222> (37)..(37)
<223> n represents any nucleotide
```

```
<400> 1072
gccattgatc ttacgcttta tcgattagac acgggtnagc ttgtaccaat ggggagccga 60
tttgatttta tggatgaacg ctctcatcat gcggcaaatg gaatatcatg caatgaagcg 120
caaaatcgca gacgtttgcg ctccatcatg gaaaacagtg ggtttgaagc atatagcctc 180
gaatgggtggc actatgtatt aagagacgaa ccatacccca atagctatct tgatttcccc 240
gttaaataaa cttttaaccg ttgcacggac aaactatata agctaactct ttcggcagga 300
aaccgcgagt atgtaactgg ttcttaggga atttatatat agtagatagt attgaagatg 360
taaggcagag cgatattgcg gtcattatct gcgtgcgctg cggcaagata gcctgataat 420
aagactgatc gcatagaggg gtgggtatttc acaccgccc 480
ctcgttaaat tcagcatggg tatcacttat gaaaattcat ctacattggg gataatagta 540
aatccagtag ggcgaaataa ttgactgtaa tttacggggc aaaacggcac aatctcaaac 600
gagattgtgc cgtttaaggg gaagattcta gaaatatttc atacttccaa ctatatagtt 660
aaggaggaga ctgaaaatga agaagtgtgt ttttttattg ttattgttat tcttaatat 720
cttaggttat gactacgtta atgaagcact g 751
```

```
<210> 1073
<211> 685
<212> DNA
```

<213> *Enterococcus flavescens* strain R689

```
<400> 1073
atttgatttt atggatgaac gctctcatca tgcggcaaat ggaatatcat gcaatgaagc 60
gcaaaatcgc agacgtttgc gctccatcat ggaaaacagt gggtttgaag catatagcct 120
cgaatggtgg cactatgtat taagagacga accatacccc aatagctatt ttgatttccc 180
cgttaaataa acttttaacc gttgcacgga caaactatat aagctaactc tttcggcagg 240
aaacccgacg tatgtaactg gttccttaggg aatttatata tagtagatag tattgaagat 300
gtaaggcaga gcgatattgc ggtcattatc tgcgtgcgct gcggcaagat agcctgataa 360
taagactgat cgcatagagg ggtggtattt cacaccgccc attgtcaaca ggcagttcag 420
cctcgttaaa ttcagcatgg gtatcactta tgaaaattca tctacattgg tgataatagt 480
aaatccagta gggcgaaaata attgactgta atttacgggg caaacgggca caatctcaaa 540
cgagattgtg ccgtttaagg ggaagattct agaaatattt catacttcca actatatagt 600
taaggaggag actgaaaatg aagaagttgt tttttttatt gttattgtta ttcttaatat 660
acttaggtta tgactacgtt aatga                                     685
```

<210> 1074

<211> 732

<212> DNA

<213> *Enterococcus faecium* strain R690

```
<400> 1074
atcgattaga cacgggtgag cttgtacca tggggagccg atttgatttt atggatgaac 60
gctctcatca tgcggcaaat ggaatatcat gcaatgaagc gcaaaatcgc agacgtttgc 120
gctccatcat ggaaaacagt gggtttgaag catatagcct cgaatggtgg cactatgtat 180
taagagacga accatacccc aatagctatt ttgatttccc cgttaaataa acttttaacc 240
gttgcacgga caaactatat aagctaactc tttcggcagg aaacccgacg tatgtaactg 300
gttccttaggg aatttatata tagtagatag tattgaagat gtaaggcaga gcgatattgc 360
ggtcattatc tgcgtgcgct gcggcaagat agcctgataa taagactgat cgcatagagg 420
ggtggtattt cacaccgccc attgtcaaca ggcagttcag aaatccagta ttcagcatgg 480
gtatcactta tgaaaattca tctacattgg tgataatagt gggcgaaaata 540
attgactgta atttacgggg caaacgggca caatctcaaa cgagattgtg ccgtttaagg 600
ggaagattct agaaatattt catacttcca actatatagt taaggaggag actgaaaatg 660
aagaagttgt tttttttatt gttattgtta ttcttaatat acttaggtta tgactacgtt 720
aatgaagcac tg                                     732
```

<210> 1075

<211> 670

<212> DNA

<213> *Enterococcus gallinarum* strain R691

```
<400> 1075
tctcatcatg cggcaaatgg aatatcatgc aatgaagcgc aaaatcgcag acgtttgcgc 60
tccatcatgg aaaacagtgg gtttgaagca tatagcctcg aatggtggca ctatgtatta 120
agagacgaac catacccaa tagctatttt gatttccccg ttaaataaac ttttaaccgt 180
tgacacggaca aactatataa gctaactctt tcggcaggaa acccgacgta tgtaactggg 240
tcttagggaa tttatatata gtagatagta ttgaagatgt aaggcagagc gatattgcgg 300
tcattatctg cgtgcgtgct ggcaagatag cctgataata agactgatcg catagagggg 360
tggtatttca caccgcccac tgtcaacagg cagttcagcc tcgttaaatt cagcatgggt 420
atcacttatg aaaattcatc tacattgggtg ataatagtaa atccagtagg gcgaaaataa 480
tgactgtaat ttacggggca aaacggcaca atctcaaacy agattgtgcc gtttaagggg 540
aagattctag aaatatttca tacttccaac tatatagtta aggaggagac tgaaaatgaa 600
gaagttgttt tttttattgt tattgttatt cttaatatat ttaggttatg actacgttaa 660
tgaagcactg                                     670
```

<210> 1076

<211> 948

<212> DNA

<213> *Escherichia coli* strain DG131/3

```
<400> 1076
atgaaaataa taatttttag agtgctaact tttttctttg ttatcttttc tgtaaagtgt 60
gttgcgaagg aatttacctt agatttctcg acagcaaaga cgtatgtaga ttcgctgaat 120
```

```
gtcattcgct ctgcaatagg tactccatta cagactatatt catcaggagg tacgtcttta 180
ctgatgattg atagtggcac aggggataat ttgtttgcag ttgatgtcag agggatagat 240
ccagaggaag ggcgggttaa taatctacgg cttattgttg aacgaaataa tttatatgtg 300
acaggatttg ttaacaggac aaataatgtt ttttatcgct ttgctgattt ttcacatgtt 360
acctttcctg gtacaactgc gggttacattg tctggtgaca gtagctatac cacgttacag 420
cgtgttgccg ggatcagtcg tacggggatg cagataaatc gccattcgtt gactacttct 480
tatctggatt taatgtcgca tagcgggaacc tcactgacgc agtctgtggc aagagcgatg 540
ttacggtttg ttactgtgac agctgaagct ttacgttttc ggcaaattca gaggggattt 600
cgtacaacac ttgatgatct cagtgggcgt tcttatgtaa tgactgctga agatgttgat 660
cttacgttga actggggaag gttgagtagt gtcctgcctg actatcatgg acaagactct 720
gttcgtgttg gaagaatttc ttttggaagt gttaatgcaa ttctgggtag cgtggcatta 780
atactgaatt gtcacatca tgcacgcga gttgccagaa ttgtacctaa tgagtttctt 840
tctatgtgcc cggtagatgg aagagtgcgt gggattacgc acaataaaat attgtgggac 900
tcatccactc tgggggcaat tttgatacgc agggctatta gcagttga 948
```

<210> 1077

<211> 1259

<212> DNA

<213> Escherichia coli strain 94C

<400> 1077

```
cacctgtata tgaagtgtat attatattaaa tgggtactgt gcctgttact ggggttttct 60
tcggtatcct attcccgga gtttacgata gacttttcga cccaacaaag ttatgtctct 120
tcgttaaata gtatacggac agagatatcg acccctcttg aacatatatc tcaggggacc 180
acatcgggtg ctgttattaa ccacacccca ccgggcagtt attttgctgt ggatatacga 240
gggcttgatg tctatcaggc gcgttttgac catcttcggc tgattattga gcaaaataat 300
ttatatgtgg ccgggttcgt taatacggca acaataactt tctaccgttt ttcagatttt 360
acacatatat cagtgcgccga tgtgacaacg gtttccatga caacggacag cagttatacc 420
actctgcaac gtgtcgcagc gctggaacgt tccggaatgc aaatcagtcg tcaactactg 480
gtttcatcat atctggcggt aatggagttc agtggttaata caatgaccag agatgcatcc 540
agagcagttc tgcgttttgt cactgtcaca gcagaagcct tacgcttcag gcagatacag 600
agagaatttc gtcaggcact gtctgaaact gctcctgtgt ataccatgac gccgggagac 660
gtggacctca ctctgaactg ggggcgaatc agcaatgtgc ttccggagta tcggggagag 720
gatggtgtca gagtggggag aatatccttt aataatatat cagcgatact gggtagctgtg 780
gccgttatac tgaattgcc aatgtcagat aactggcgac agggccgtta taaaataaaa caatacatta 900
agtcaaccag aatgtcagat agcgtttctg aacagaaagt cacagttttt atatacaacg 960
tgggaaagta atacagctgc agcgtttctg tgtttatggc ggttttattt gcattagttt 1020
ggtaataaaa ggagttaagt atgaagaaga tgtttatggc tgagttttcc aagtataatg 1080
ctgttaaatg aatggcggcg gattgtgcta aaggtaaaat ctggaccagt cgctggaatc 1140
aggatgacac atttacagt aaggttgacg ggaaagaata cgtgcacaatc aaatccagta 1200
tgcaaccgtt actgcaaagt gctcagctga caggaatgac tgatgactga ggcataacc 1259
cctgtgaatc aggctccgga tttgctgaag tgcagtttaa
```

<210> 1078

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1078

agttctgcgt tttgtcactg tc

22

<210> 1079

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1079
cggaagcaca ttgctgatt 19

<210> 1080
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1080 25
tatagctact gtcaccagac aatgt

<210> 1081
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1081 20
atgtcagagg gatagatcca

<210> 1082
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1082 23
ttgarcraaa taatttatat gtg

<210> 1083
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1083 20
tgatgatgrc aattcagtat

<210> 1084
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1084

ccacgccgct ttgctgattt ttcacatggt accgcgtgg 39

<210> 1085
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1085 34
ccacgccact gtctgaaact gtcctgtgc gtgg

<210> 1086
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1086 20
ctactccgc cttttgggtt

<210> 1087
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1087 20
ctcacagccc gaaacagcct

<210> 1088
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1088 . 20
tgccgtttcc tgtatccgtc

<210> 1089
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1089 20
atccacacgg gctagacctc

<210> 1090
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1090
aatagcgcgg acgaattgga c 21

<210> 1091
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1091
aacgcggcac tgtttcccaa 20

<210> 1092
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1092
tcggcaagac aatatgacag c 21

<210> 1093
<211> 381
<212> DNA
<213> Staphylococcus saprophyticus strain CSsa-165

<400> 1093
taacggggcgt ctcgatagaa aaacacgtga aaatcccaat gattataaac aatcaatata 60
cgatttttgct gaagctgtaa caaaagggtat taaggaacaa acaaataaaa attaataggc 120
aacttaacca gaatcgtaa aactatatga cgattctggt tttttaaatt caaaaagtgt 180
tctaaaaaat ttacctgctt ttttaaagta taggtataaa atacaattga ttaaaaatagt 240
aaaggaaatg aatcatgaaa caattaacta agcctttata cttttaccta ttacttttta 300
ttacaacaac actgattggc gcgttactat tatatttgcc aatcacaggt aaacatccta 360
ttgattttgt ggacgcccg t 381

<210> 1094
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1094
ggtaaaacag gtactttctaa cta 23

<210> 1095
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1095
cgatagaagc agcaggacaa 20

<210> 1096
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1096
ctgatggatg cggaagatac 20

<210> 1097
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1097
tcytcaaaaag ggatcacwaa agtmac 26

<210> 1098
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1098
tcttcaaaaat cgaaaaagcc gtc 23

<210> 1099
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1099
tcaaaaggga tcacwaaagt mac 23

<210> 1100
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1100
gtaaakcccg gcatrgtrtt gatttc 26

<210> 1101
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1101
gacggytttt tygattttga aga 23

<210> 1102
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1102
aaaaartcga tkcgagcmag acc 23

<210> 1103
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1103
atcccgctat gaaaacgatc 20

<210> 1104
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1104
ggatcaacac agtagaaccg 20

<210> 1105

<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1105
ctcctacgat tctcttgaya aatca 25

<210> 1106
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1106
caaccgatct caacaccggc aat 23

<210> 1107
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1107
ctcatttgac ttcttccttt gct 23

<210> 1108
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1108
gtaagaatcg gaaaagcgga agg 23

<210> 1109
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1109
acatcgtgat cgctaaaagg agc 23

<210> 1110
<211> 23

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1110
acgagaaaga caacaggaag acc 23

<210> 1111
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1111
ctttttccgg ctcgwyttcc tgatg 25

<210> 1112
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1112
ggctgygata ttcaaagctc 20

<210> 1113
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1113
accgacctca cagcccgaaa 20

<210> 1114
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1114
tcwgagcctt tttccggctc g 21

<210> 1115
<211> 26
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1115

tttcgggctg tgaggtcggb tghgcg

26

<210> 1116

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1116

tttcgggctg tgaggtcggb tghgcg

27

<210> 1117

<211> 801

<212> DNA

<213> Enterococcus faecium strain U94526

<400> 1117

aaattcgatc	cgcactacat	cggaattaca	aaaaacggtg	tatggaagct	atgcaagaag	60
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<211> 24

<212> DNA

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<223> Description of Artificial Sequence:
Oligonucleotide

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24

<210> 1119

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

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tttcgggctg tgaggtcggg tghgc 25

<210> 1120
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Oligonucleotide

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tttcgggctg tgaggtcggg tghg 24

<210> 1121
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Oligonucleotide

<400> 1121
tgtttgwatt gtcygyatc cc 22

<210> 1122
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1122
tggtgcattg ctacgtgg 18

<210> 1123
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Oligonucleotide

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<400> 1124

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22

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<220>
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<400> 1126
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21

<210> 1127
<211> 20
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<220>
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Oligonucleotide

<400> 1127
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20

<210> 1128
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<220>
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Oligonucleotide

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<210> 1129
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Oligonucleotide

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atgatgachg amatgatgaa aac

23

<210> 1130
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<210> 1131
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Oligonucleotide

<400> 1131
catctggagc tacrtarcca gt 22

<210> 1132
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<212> DNA
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1132
agtgaaaara tggctgctgc 20

<210> 1133
<211> 23
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1133
catcaagaac actggctayg tag 23

<210> 1134
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<212> DNA
<213> Artificial Sequence

<220>
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Oligonucleotide

<400> 1134
ctagatagag ctaaaacctt cct 23

<210> 1135
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 <212> DNA
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<220>
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 Oligonucleotide

<400> 1135
 cattatgcaa acgccatttc aag 23

<210> 1136
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 <213> Artificial Sequence

<220>
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 Oligonucleotide

<400> 1136
 acttgtccac gttsgatrtc t 21

<210> 1137
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 <213> Artificial Sequence

<220>
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<400> 1137
 aattaatggc tgcwgttgay gaa 23

<210> 1138
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 <212> DNA
 <213> Enterococcus gallinarum

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 atcgcaccaa caatggattg gtattggtat caaggaaacc tcgcgaatgt tcgcaatgat 180
 acttggctag aagatcacaa aaactgtcac cagctgactt tttctagcca aggatttata 240
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 gaggatggct gtatccaagg actgcttgaa ctaatgaacc tgcttatgt tgggtgcat 360
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 ggaatcgcta gtgctccac tttgctttta tcccgcctatg aaaacgatcc tgccacaatc 480
 gatcgtttta ttcaagacca tggattcccc atctttatca agccgaatga agccggttct 540
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 ttaaaccgaaa tcaaacaccat gccgggattt actgggcact cccgctaccc agctatgatg 960
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 gacaaacgat ga 1032

<210> 1139

<211> 1768
 <212> DNA
 <213> Enterococcus faecium strain BM4147

<400> 1139
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 gatacctatg agttggttaa agcattagaa aacgggaaac tgggcggtgc cgcattggat 180
 gtattggaag gagaggaaga gtttttctac tctgattgca cccaaaaacc aattgataat 240
 caattttttac ttaaaacttca aagaatgcct aacgtgataa tcacaccgca tacggcctat 300
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<210> 1140
 <211> 1086
 <212> DNA
 <213> Enterococcus casseliflavus

<400> 1140
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 aatcatctcc ctatgactac gacctctctt tgatcgggat cgccccagat gctatggatt 180
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<210> 1141
 <211> 3946

<212> DNA
<213> Enterococcus faecium strain BM4147

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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1142 25
gacacctaa atgattctca ggtgg

<210> 1143
<211> 25
<212> DNA
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Oligonucleotide

<400> 1143 25
caattagctt agcaataggt gttgg

<210> 1144
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Oligonucleotide

<400> 1144 20
tgtyttcaa gggtcagctc

<210> 1145
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Oligonucleotide

<400> 1145 20
aacatattkg gttgataggt

<210> 1146
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Oligonucleotide

<400> 1146
gggattacct atgccaatat gat 23

<210> 1147
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Oligonucleotide

<400> 1147
agctgtgtta gvcgaacat cttg 24

<210> 1148
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Oligonucleotide

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gactttgttt ggcgtgatat 20

<210> 1149
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Oligonucleotide

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<210> 1150
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Oligonucleotide

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tgataatcac accgcatacg 20

<210> 1151
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<220>
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Oligonucleotide

<400> 1151

tgctgtcata ttgtcttgcc 20

<210> 1152
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<212> DNA
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<220>
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Oligonucleotide

<400> 1152 20
ataaagatga taggccggtg

<210> 1153
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<220>
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Oligonucleotide

<400> 1153 20
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<210> 1154
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Oligonucleotide

<400> 1154 20
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<210> 1155
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<400> 1155 21
cagtgttca ttaacgtagt c

<210> 1156
<211> 23
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<220>
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Oligonucleotide

<400> 1156 23
gttgaaatgc atcacgaaca att

<210> 1157
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<213> Artificial Sequence

<220>
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Oligonucleotide

<400> 1157
aagaacgttt cagttaagga aat

23

<210> 1158
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Oligonucleotide

<400> 1158
aagaggtaat gtctgtggt

19

<210> 1159
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Oligonucleotide

<400> 1159
tgaaggtttg ccagggtga

18

<210> 1160
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<220>
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Oligonucleotide

<400> 1160
cgtttctggt aaagaaatta gaag

24

<210> 1161
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<220>
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Oligonucleotide

<400> 1161
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18

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Oligonucleotide

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<223> Description of Artificial Sequence:
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<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1164
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<223> Description of Artificial Sequence:
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<210> 1166
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<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1166
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<210> 1167

<211> 14
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<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1167
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14

<210> 1168
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<223> Description of Artificial Sequence:
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<210> 1169
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<213> Streptococcus pneumoniae strain SP-665

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<223> Description of Artificial Sequence:
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<210> 1171
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

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acgaggatga tttgattgtc 20

<210> 1172
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<212> DNA
<213> Streptococcus pneumoniae strain 64147

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<210> 1173
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<212> DNA

<213> Streptococcus pneumoniae strain CS109

<400> 1173

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<211> 18

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1174

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18

<210> 1175

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1175

gttactggtg tagaaatggt c

21

<210> 1176

<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1176
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19

<210> 1177
<211> 20
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1177
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<210> 1178
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<212> DNA
<213> *Staphylococcus aureus* NCTC 8325

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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
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<210> 1180
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 <212> DNA
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<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

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<210> 1181
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

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<210> 1182
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
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 Oligonucleotide

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<210> 1183
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 <213> Streptococcus pneumoniae strain 175

<400> 1183

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<211> 623

<212> DNA

<213> Streptococcus pneumoniae strain StrR-05

<400> 1184

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ttaaggattt cttgcagatg gattatgcga ccaaggctag tctggatttg gttgagaatg 360
ctcgtcagc taagaaacaa ggcagtcttt tctggctttt ggatgaaacc aaaacggcta 420
tggggatgcg tctcttgctg tcttggttgc atgcgccctt gattgataag gaacgaatcg 480
tccaacgtca agaagtagtg caggtctttc tcgaccattt ctttgagcgt agtgacttga 540
cagacagtct caagggtgtt tatgacattg agcgcttggc tagtcgtgtt tcttttggca 600
aaaccaatcc aaaggatctc ttg 623
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<210> 1185

<211> 621

<212> DNA
<213> Streptococcus pneumoniae strain StrR-06

<400> 1185
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gtaacctcaa ggctcgagaa gtggtgttgg gttatgactt gtctgaggaa gaagaacaaa 120
tcctcagccg ccagatgaat ctggtactct cttatgaaaa agaaagcttt gaagaccttc 180
atattattgga tttgcgattg gcaacgggtg agcaaaccggc atctagtaag ctgctccagt 240
atgttcacg gactcagatg aggggaattga accacctcaa acctgttatc cgctacgaaa 300
ttaaggattt cttgcagatg gattatgcga ccaaggctag tctggatttg gttgagaatg 360
ctcgctcagg taagaaacaa ggcagtcttt tctggctttt ggatgaaacc aaaacggcta 420
tggggatgcg tctcttgctg tcttggattc atcgccctt gattgataag gaacgaatcg 480
tccaacgtca agaagtagtg caggtctttc tcgaccattt ctttgagcgt agtgacttga 540
cagacagtct caagggtgtt tatgacattg agcgcttggc tagtcgtgtt tcttttggca 600
aaaccaatcc aaaggatctc t 621

<210> 1186
<211> 622
<212> DNA
<213> Streptococcus pneumoniae strain StrR-11

<400> 1186
tgacgggtga cttttatgtg acaggtcttt tggatttcac gctggtttgt ggggaaatcc 60
gtaacctcaa ggctcgagaa gtggtgttgg gttatgactt gtctgaggaa gaagaacaaa 120
tcctcagccg ccagatgaat ctggtactct cttatgaaaa agaaagcttt gaagaccttc 180
atattattgga tttgcgattg gcaacgggtg agcaaaccggc atctagtaag ctgctccagt 240
atgttcacg gactcagatg aggggaattga accacctcaa acctgttatc cgctacgaaa 300
ttaaggattt cttgcagatg gattatgcga ccaaggctag tctggatttg gttgagaatg 360
ctcgctcagg taagaaacaa ggcagtcttt tctggctttt ggatgaaacc aaaacggcta 420
tggggatgcg tctcttgctg tcttggattc atcgccctt gattgataag gaacgaatcg 480
tccaacgtca agaagtagtg caggtctttc tcgaccattt ctttgagcgt agtgacttga 540
cagacagtct caagggtgtt tatgacattg agcgcttggc tagtcgtgtt tcttttggca 600
aaaccaatcc aaaggatctc tt 622

<210> 1187
<211> 622
<212> DNA
<213> Streptococcus pneumoniae strain StrR-55

<400> 1187
tgacgggtga cttttatgtg acaggtcttt tggatttcac gctggtttgt ggggaaatcc 60
gtaacctcaa ggctcgagaa gtggtgttgg gttatgactt gtctgaggaa gaagaacaaa 120
tcctcagccg ccagatgaat ctggtactct cttatgaaaa agaaagcttt gaagaccttc 180
atattattgga tttgcgattg gcaacgggtg agcaaaccggc atctagtaag ctgctccggt 240
atgttcacg gactcagatg aggggaattga accacctcaa acctgttatc cgctacgaaa 300
ttaaggattt cttgcagatg gattatgcga ccaaggctag tctggatttg gttgagaatg 360
ctcgctcagg taagaaacaa ggcagtcttt tctggctttt ggatgaaacc aaaacggcta 420
tggggatgcg tctcttgctg tcttggattc atcgccctt gattgataag gaacgaatcg 480
tccaacgtca agaagtagtg caggtctttc tcgaccattt ctttgagcgt agtgacttga 540
cagacagtct caagggtgtt tatgacattg agcgcttggc tagtcgtgtt tcttttggca 600
aaaccaatcc aaaggatctc tt 622

<210> 1188
<211> 599
<212> DNA
<213> Streptococcus oralis ATCC 35037

<400> 1188
gggtgacttt tatgtaacgg ggctattgga tttcacgttg gtttgtgggg aaattcgcaa 60
tctcaaggct agagaagtgg tgctgggtta tgacttgtct gaggaagaag aacaaatcct 120
cagtcgtcag atgaatctgg tgctttctta tgagaaggaa ggctttgagg accttcattt 180
actggatcca cgactggcag ctgtggagca agcggcagct agtaagctcc tccagtatgt 240
tcaccggacc cagatgcggg aattgaacca cctcaaacca gttatccgct atgaaatcaa 300

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agattttctta cagatggact atgcgaccaa ggctagtctg gatttggttg agaatgcccg 360
ttcaggcaag aagcaaggca gtcttttctg gcttttagat gaaaccaaga cggctatggg 420
aatgcgtctc ttgcgttctt ggattcatcg tcctttgatt gataaggagc gaatcgtcca 480
gcgtcaagag gtggtgcagg tctttcttga ccacttcttt gagcgtagtg atttaacgga 540
cagtccttaag ggtgtttatg atatcgaacg cttggctagt cgggtttctt ttggcaaga 599
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<210> 1189
<211> 624
<212> DNA
<213> Streptococcus mitis ATCC 49456

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ccgcaatctc aaggctcgag aagtgggtgct gggttatgac ttgtctgagg aagaagaaca 120
gattccttagt cgtcagatga atctgggtact ttcttatgaa aaagaaggct ttgaagacct 180
tcattttactg gattcacgat tggcagctgt ggagcaagcg gcatctagta aactgcttca 240
gtatgttcat cggactcaga tgaggggaatt gaaccacctc aagcctgtta tccgctatga 300
aatcaaagat tttttgcaga tggattatgc gaccaaggct agtctggatt tggttgagaa 360
tgcccgttca ggcaagaagc aaggtagtct tttttggctt ttggatgaaa ccaaacagc 420
tatgggaatg cgtctcttgc ggtcttggat tcatcgcccc ctgattgata aggaacgaat 480
tgtccaacgc caagaagttg tgcaggtctt tctcgacatc ttctttgagc gtagtgattt 540
gacagacagt ctcaagggtg tttatgacat tgagcgcttg gctagtcgtg tttcttttgg 600
caaaaccaat ccaaaggatc tctt 624
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<210> 1190
<211> 599
<212> DNA
<213> Streptococcus mitis strain LSPQ 2583

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<400> 1190
tgacgggtga ctttcagggt actagtttag aggactttgt cttggtctgc ggggaaatcc 60
gcaatttgaa agctagggaa gtggtgctgg gctatgcctt gccagaagct gaggagcagg 120
ttttggctgg acagatgaac cttttactgt cctatgtgga gaaggttttg gaggatgttc 180
agctgctggg cgaggagctg tctcctatgg agcgtcaggc agcagggaaa ctgctggagt 240
atgtgcaccg gaccagatg agggagctca gccatttgaa gaaggctcag cattatgaaa 300
tcaaggactt cctgcaaatg gactatgcca ccaaggcgag tctggatttg acagaaaatg 360
ctcgcctcggg caagaagcac ggcagtcttt attggctgat ggacgagact aagacggcca 420
tgggcgggccg catgctgcgc tcttggatcc agcgtccgct gattgatgaa gcgcgaatta 480
gccagcgaca gaatgtcgtt gaggttttcc tggatcattt ctttgagcgg agtgatttga 540
cggagagcct caaggggggtc tatgatatcg agcggctggc tagtcgggtg tcttttggc 599
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<210> 1191
<211> 622
<212> DNA
<213> Streptococcus mitis ATCC 903

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<400> 1191
tgacgggtga ctttcagggt actagtttag aggactttgc cttggtctgc ggggaaatcc 60
gtaatttgaa ggctagggaa gtggtgctgg gctatgcttt gccagaagct gaggagcagg 120
tcttggctgg acagatgaat cttttgctgt cctatgtaca gacggccttg gacgatgtcc 180
agctgctggg cgaggaactg tctcctatgg agcgtcaggc agcggggaaa ttgctagagt 240
atgtgcaccg gaccagatg agggagctca gccatttgaa gaaggcccag cattatgaaa 300
tcaaggactt tctgcaaatg gattatgcta ccaaggcgag tctggatttg acagaaaatg 360
ctcgcctcggg taagaaacac ggcagtcttt attggctgat ggacgagacc aagacggcca 420
tgggcgggccg tatgctgcgc tcttggatcc agcgtccgct gattgatgaa gtgcgaatta 480
gccagcgcca gaatgtcgtc gaggttttcc tggaacattt ctttgagcgg agtgatttga 540
cggagagcct caagggagtc tatgatatcg agcggctggc tagtcgggtg tcttttggca 600
agaccaatcc aaaggatctc tt 622
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<210> 1192
<211> 22
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1192

ggtaaaacag gaacctctaa ct

22

<210> 1193

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1193

ggtaagacag gtacttctaa ct

22

<210> 1194

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1194

catttcaagt aatacaacag aatc

24

<210> 1195

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1195

catttcaagt aacacaactg aatc

24

<210> 1196

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1196

gccatttcaa gtaatacaac agaa

24

<210> 1197

<211> 25

<212> DNA

<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence:
        Oligonucleotide

<400> 1197
caaacgccat ttcaagtaat acaac
25

<210> 1198
<211> 381
<212> DNA
<213> Staphylococcus saprophyticus ATCC 43867

<400> 1198
aacgggcgctc tcgatagaaa aacacgtgaa aatcccaatg attataaaca atcaatatac 60
gatttttgctg aagctgtaac aaaagggtatt aaggaacaaa caaataaaaa ttaataggca 120
acttaaccag aatcggttaaa actatatgac gattctgggt ttttaaattc aaaaagtttt 180
ctaaaaaatt tacttgcttc tttaaagtat aggtatgaaa tacaattgat taaaatagta 240
aaggaaatga atcatgaaac aattaactaa gccttttatac ttttacctat tactttttat 300
tacaacaacg ctgattggcg cgttactatt atatttgcca atcacakgta aacatcctat 360
tgattttgtg gacgcccgtt a
381

<210> 1199
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
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<400> 1199
gtatttaaaga agatatccaa aaagc
25

<210> 1200
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
        Oligonucleotide

<400> 1200
tcaaagaaga aactaaaaaa gctgt
25

<210> 1201
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
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<400> 1201
aacgtaggtg tccttcttc
19

<210> 1202
<211> 22
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1202
gtgttgaaat gttccgtaaa ca

22

<210> 1203
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<220>
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<222> (3)..(3)
<223> n represents a modified base

<220>
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<220>
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<222> (9)..(9)
<223> i

<220>
<221> modified_base
<222> (12)..(12)
<223> i

<400> 1203
ggngarmgng gnaaygarat g

21

<210> 1204
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<213> Artificial Sequence

<220>
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Oligonucleotide

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<223> n represents a modified base

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<222> (10)..(10)
<223> n represents a modified base

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<223> n represents a modified base

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<221> modified_base
<222> (10)..(10)
<223> i

<220>
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<223> i

<400> 1204
gcnaayaacn tcnwmyatgc c

21

<210> 1205
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
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Oligonucleotide

<220>
<221> misc_feature
<222> (6)..(6)
<223> n represents a modified base

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<222> (18)..(18)
<223> i

<400> 1205
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20

<210> 1206
<211> 19
<212> DNA
<213> Artificial Sequence

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Oligonucleotide

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<223> n represents a modified base

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<222> (9)..(9)
<223> i

<220>
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<223> i

<400> 1206
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19

<210> 1207
<211> 20
<212> DNA
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<220>
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<400> 1207
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20

<210> 1208
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
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Oligonucleotide

<400> 1208
tcaaaaagtt ttctaaaaaa ttac

25

<210> 1209
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1209
acgggcgtcc acaaaatcaa tagga

25

<210> 1210
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1210
accagcttgc ccaatacaaa gg

22

<210> 1211
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1211
attcttgtaa caggctttga tccc

24

<210> 1212
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<212> DNA
<213> Artificial Sequence

<220>
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Oligonucleotide

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<222> (15)..(15)
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<220>
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<222> (18)..(18)
<223> i

<400> 1212
ccnccnrgng gnganacngc wcc

23

<210> 1213
<211> 26
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<213> Artificial Sequence

<220>
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Oligonucleotide

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<223> n represents a modified base

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<223> n represents a modified base

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<220>
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 <222> (24)..(24)
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<400> 1213
 aargngngna cngcngcnat hccngg

26

<210> 1214
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1214
 ggtaaaacag gtacctctaa cta

23

<210> 1215
 <211> 1337
 <212> DNA
 <213> Streptococcus pyogenes strain D471

<400> 1215
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 caaactagca tctaaataaaa gatcgaaatg cagttatcaa aaatgcaagc tcctatcggc 180
 ccttggtttta attattactc acattgcctt aatgtattta cttgcttatt attaatcttt 240
 ttgctaagtt agtagcgta gttattcatt gaaaggacat tattatgaaa attccttgtaa 300
 caggctttga tccctttggc ggcgaaagcta ttaatcctgc ccttgaagct atcaagaaat 360
 tgccagcaac cattcatgga gcagaaatca aatgtattga agttccaacg gtttttcaaa 420
 aatctgccga tgtgtctccag cagcatatcg aaagctttca acctgatgca gtcctttgta 480
 ttgggcaagc tgggtggccgg actggactaa cgccagaacg cgttgccatt aatcaagacg 540
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 gtaaagcagc ttatthtttca accttgccaa tcaaagcgat ggttgctgcc attcatcagg 660
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ttccctttat gatggaacag gttgttgata aacctaatac agctgccatg aacctcgatg 840
atattacaag aggaattgag gctgctatgt ttgccattgt cgatttcaaa gatcggtccg 900
atttaaaacg ttaggggggc gctactcact gactgtgacg ctactaaacc tatttttaaaa 960
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atagtttgcc agtaattaag aaacgttggt gatctaaatg agcaatccca ttcaaaacat 1140
taaggtcagg gtaatgggac ttatcaagat ttaaggcttt taacaaagga ctaatatcat 1200
aggtggctac cacctttcca gaatcaggtt ggagtttgac aatagtattg gtttgccaaa 1260
tattggcata gagataacca tctacatact ctaattcggt aagcattgag atagggacac 1320
tttctatagc aactagt 1337
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<210> 1216
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1216
ggtaagactg gtacatcaaa cta 23

<210> 1217
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1217
caaatgccat ttcaagtaac acaac 25

<210> 1218
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1218
caaacgccat ttcaagtaac acaac 25

<210> 1219
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1219
caaatgctat ttcaagtaat acaac 25

<210> 1220
<211> 25

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1220
caaacgccat ttcaagtaat acgac

25

<210> 1221
<211> 23
<212> DNA
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<220>
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Oligonucleotide

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<223> n represents a modified base

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<223> i

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<400> 1221
gayacnccng gncaygtnga ytt

23

<210> 1222
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<212> DNA
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Oligonucleotide

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<223> i

<400> 1222
atygayacnc cnggnca ygt ngaytt

26

<210> 1223
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<223> i

<400> 1223
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26

<210> 1224
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24

<210> 1225
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<222> (21)..(21)

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<223> i

<400> 1225

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26

<210> 1226

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

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Oligonucleotide

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<223> n represents a modified base

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<400> 1226
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<210> 1227
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Oligonucleotide

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<400> 1228
gtncncytnk cngaratgtt yggntaygc

29

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<210> 1229
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<213> Artificial Sequence

<220>
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<223> n represents a modified base

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<222> (12)..(12)
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<222> (21)..(21)
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<223> i

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<222> (18)..(18)
<223> i

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<400> 1229
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<210> 1230
<211> 2145
<212> DNA
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<213> Escherichia coli

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<400> 1230
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ctgtttctaca ccggtgtaaa ccataaaatc ggtgaagttc atgacggcgc tgcaaccatg 180
gactggatgg agcaggagca ggaacgtggg attaccatca cttccgctgc gactactgca 240
ttctggtctg gtatggctaa gcagtatgag ccgcacgca tcaacatcat cgacaccccg 300
gggcacggtg acttcacaat cgaagtagaa cgttccatgc gtgttctcga tgggtgcggta 360
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<210> 1231

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

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Oligonucleotide

<400> 1231

gcgagcccgga agataaaaaa gaacctctgc tgctcgc

37

<210> 1232

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1232

ggagccgcgc gatatttataa atgaatgttg ataaccggct cc

42

<210> 1233
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1233
gcgagcggtta ctggtgtaga aatgttccgg ctgcg

35

<210> 1234
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1234
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20

<210> 1235
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1235
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38

<210> 1236
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1236
gcgagccgtg gtgaagttcg cggttggtggc tcgc

34

<210> 1237
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
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Oligonucleotide

<400> 1237
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38

<210> 1238

<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1238
gcgagcggcg ttaatttttg caccgaagaa gagctcgc 38

<210> 1239
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1239
gcgagcgcag acctttcagc agaggaggct cgc 33

<210> 1240
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<212> DNA
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<220>
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Oligonucleotide

<400> 1240
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<210> 1241
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<212> DNA
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<220>
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Oligonucleotide

<400> 1241
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<210> 1242
<211> 600
<212> DNA
<213> Enterococcus faecium strain BM4147-1

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gtaccagtac ttaagaatca atggaaagaa aatcctaata aagtatttga tcaatgtgaa 180
ggttcttttg tttatccgat gtttgtcaaa cctgcgaata tgggttctag tgcggcatt 240
acaaggcgag aaaaccgaga agagctgcaa aatgctttag caacagccta tcagtatgat 300
tctcgagcaa tcgttgaaca aggaattgaa gcgcgcgaaa tcgaagttgc tgtattagga 360
aatgaagatg ttcggacgac tttgcctggc gaagtcgtaa aagacgtagc attctatgat 420
tatgaagcca aatatatcaa taataaaatc gaaatgcaga ttccagccga agtgccggaa 480
gaagtttatc aaaaagcgca agagtacgag aagtttagctt acacgatgtt aggtggaagc 540

ggattgagcc ggtgcgattt ctttttgaca aataaaaaatg aattattcct gaatgaatta 600

<210> 1243

<211> 2275

<212> DNA

<213> *Enterococcus faecalis*

<400> 1243

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ggtcagcaac	gatgggaatg	aaagtcttag	aagaaatfff	agataaagag	aaaatttcaa	180
tgccgattcg	aaaaattaat	attaatgaat	taactcaaca	aacacaggct	ttaattgtca	240
caaaagctga	actaacggaa	caagcacgta	aaaaagcacc	gaaagcgaca	cacttatcag	300
taaaaagtta	tggttaatcc	ccaaaaatat	gaaacagtgg	gtttcgctct	taaaagaaa	360
tgcctagaga	ggaagaaaac	aatggaaaat	cttacgaata	tttcaattga	attaaatcaa	420
cagtttaata	caaaagaaga	agctattcgc	ttttccggcc	agaaactagt	cgaggcaggc	480
tgtgttgagc	ccgcttatat	cgaagcaatg	attgaaagag	accaattgct	atctgcccac	540
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tcaggaatct	gtgtagtgcg	agtcccagag	ggcgttaatt	ttggcaccga	agaagatgaa	660
aaaattgcta	ccgtattatt	tgggattgcc	ggagtcgggtg	aagaacattt	gcaattagtc	720
caacaaattg	cactttattg	tagtgatatg	gataacgtgg	tgcaacttgc	cgatgcatta	780
agtaaagaag	aaataacaga	aaatttagcc	attgcttaaa	ggagagaata	agaatgaacg	840
cagtacattt	tggagcagga	aatattggac	gcggcctttat	tggcgaaatt	ttagctaaaa	900
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gtaaaagtta	tacaattgaa	ttggccgatg	cctcacatca	acaaattaac	gttgaaaatg	1020
tgaccggggt	aaataacatg	acagaaccag	aaaaagtagt	agaagcaatt	gcggaagccg	1080
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gaagatccag	aaacggttta	aaatattaaa	caaaacgtag	aactgctatg	cgcgaccaca	1980
agtagcataa	ttaacaaaat	ccttctacca	agatacttca	catttcttaa	ttaaagaaaa	2040
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agggtttttt	gtatggcaaa	atacagtttt	gaaattttaa	cttaaacttg	ttcatgacta	2160
cttatatggc	caaggaggtc	taagggtttc	cgcaaagaag	tatgggttta	aagatagtct	2220
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<210> 1244

<211> 442

<212> DNA

<213> *Staphylococcus aureus* subsp. *aureus* ATCC 25923

<400> 1244

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gaaacattgt	gttctgtatg	taaaagccgt	cttgataatc	tttagtagta	ccgaagctgg	180
tcatacgaga	gttatatttt	ccagccaaaa	cgatattttt	ataatcatta	cgtgaaaaag	240
gtttcccttc	attatcacac	aaatatttta	gcttttcagt	ttctatatca	actgtagctt	300
ctttatccat	acgttgaata	attgtacgat	tctgacgcac	catcttttgc	acacctttaa	360
tgttattttg	tttaaaagca	tgaataagtt	tttcaacaca	acgatgtgaa	tctttctaaga	420
agtcaccgta	aatgaagga	tc				442

<210> 1245

<211> 845
 <212> DNA
 <213> *Bacillus anthracis* strain CIP 9444

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 acagttgcaa tgtcttccac agatggactt gttcgtggca cagaagtaga agatactggt 180
 aaagcaatct ctgtaccagt tggatgatga acacttgggtc gtgtatttaa cgtattaggt 240
 gatgcaattg acttagatgg tgaggttcct gcggatgtac gtcgtgatcc aattcaccgt 300
 caagcacctg cattcgaaga attatctact aaagtagaaa ttcttgaaac tggattataaa 360
 gtagtagact tacttgctcc ttacattaag ggtggtgaaga tcggtctatt cgggtggtgcc 420
 ggtatctctg tattcgctgg ttaggtgag cgtactcgtg agggtaatga cttataccac 540
 gaaatgagcg attctggcgt aattaagaaa actgcatggg tattcggaac aatgaacgag 600
 ccacctggag cagctcaacg tgttgcggtt acaggtttta caatggctga gcatttcctg 660
 gatgagcaag gacaagatgt acttctgttc atcgataata tcttcggttt cagcgaagca 720
 ggttctgaag tatctggcct tcttgccgt atgccatctg cggtaggtta ccaaccaaca 780
 cttgcaacag aaatgggtca attacaagag cgtattacat ctacaaataa agggctctatc 840
 acgtc 845

<210> 1246
 <211> 656
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 <213> *Bacillus mycoides* ATCC 11986

<400> 1246
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 tggtcgtggc acagaagtag aagatactgg taaagcaatc tctgtaccag ttggtgatgt 120
 aacacttgggt cgtgtattta acgtattagg tgatgcaatt gacttagatg gtgatgttcc 180
 tgcggatgta cgtcgtgatc caattcaccg tcaagcgctt gcattcgaag agttatctac 240
 taaagtagaa attcttgaaa ctggtattaa agtagtagac ttacttgctc cttacattaa 300
 ggggtggtgaag attggtctat tcggtggtgc cggcgtagggt aaaacagtat taattcagga 360
 attaatattt aacatcgcac aagagcacgg tggtatctct gtattcgctg gtgtaggtga 420
 gcgtactcgt gaaggtaacg acttatacca cgaaatgagc gattctggcg taattaagaa 480
 aactgcgatg gtattcggac aaatgaacga gccacctgga gcacgtcaac gtggtgcatt 540
 aacaggttta acaatggctg aacatttccg tgatgagcaa ggacaagacg tactattgtt 600
 catcgataac atcttccgtt tcacgcaagc ggggtctgaa gtatctgccc ttcttg 656

<210> 1247
 <211> 791
 <212> DNA
 <213> *Bacillus thuringiensis* ATCC 10792

<400> 1247
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 tcgtacagtt gcgatgtctt ccacagatgg acttggtcgt ggcacagaag tagaagatac 120
 tggtaaacca atctctgtac cagttggtga tgtaacactt ggtcgcgtat ttaacgtatt 180
 aggtgatgca attgacttag atgggtgaggt tcctgcagat gtacatcgtg atccaattca 240
 ccgtcaagca cctgcattcg aagaattatc tactaaagta gaaattcttg aaactgggtat 300
 taaagtagta gacttacttg ctccctacat taagggtgggt aagatcggcc tattcgggtg 360
 tgccggcgta ggtaaaacag tattaattca ggaatttaatt aacaacatcg cacaagagca 420
 cggtgggtatc tctgtattcg ctggtgtagg tgagcgtact cgtgagggtg atgacttata 480
 ccacgaaatg agcgattctg gcgtaatcaa gaaaactgcg atgggtattcg gacaaatgaa 540
 cgagccacct ggagcacgtc aacgtgttgc attaacaggt ttaacaatgg ctgagcattt 600
 ccgtgatgag caaggacaag acgtacttct gttcatcgat aacatcttcc gtttcacgca 660
 agcgggttct gaagtatctg cccttcttgg tctgatgcca tctgcggtag gttaccaacc 720
 aacacttgca acagaaatgg gtcaattaca agagcgtatt acatctacaa ataaagggtc 780
 tatcacgtct a 791

<210> 1248
 <211> 825
 <212> DNA

<213> *Bacillus thuringiensis* strain BGSC 4AC1

```
<400> 1248
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gaagttgcac ttcatttagg tgatgataca gttcgtacag ttgcgatgtc ttccacagat 120
ggacttggtc gtggcacaga agtagaagat actggtaaag caatctctgt accagttggg 180
gatgcaacac ttggacgtgt attcaacgta ttaggtgatg caattgactt agatggtgaa 240
cttctgcggg atgtacaccg tgatccaatt caccgtcaag cacctgcatt cgaagaatta 300
tctactaaag tagaaattct tgaaactggg attaaagtag tagacttact tgctccttac 360
attaagggtg gtaagatcgg cctattcggg ggtgccggcg taggtaaaac agtattaatt 420
caggagttaa tcaataacat cgcacaagag cacggtggta tctctgtatt cgctgggtga 480
ggtgagcgta ctcgtagagg taatgactta taccacgaaa tgagcgattc tggcgtaatc 540
aagaaaactg cgatggtatt cggacaaatg aacgagccac ctggagcacg tcaacgtggt 600
gcattaacag gtttaacaat ggctgagcat ttccgtgatg agcaaggaca agacgtactt 660
ctgttcacgc ataacatctt ccgtttcacg caagcgggtt ctgaagtatc tgcccttctt 720
ggtcgtatgc catctgcggg aggttaccaa ccaacacttg caacagaaat ggggtcaatta 780
caagagcgta ttacatctac aaataaaggg tctatcacgt ctatc 825
```

<210> 1249

<211> 775

<212> DNA

<213> *Bacillus thuringiensis* strain HER 1236

```
<400> 1249
atctacaacg cccttacggt aaaacaaagc aacgaaaacg gaagtattaa cttaacattt 60
gaagttgcac ttcatttagg tgatgataca gttcgtacag ttgcgatgtc ttccacagat 120
ggacttggtc gtggcacaga agtagaagat actggtaaag caatctctgt accagttggg 180
gatgtaacac ttgggtcggt atttaacgta ttaggtgatg caattgactt agatggtgag 240
gttctgcag atgtacatcg tgatccaatt caccgtcaag cacctgcatt cgaagaatta 300
tctactaaag tagaaattct tgaaactggg attaaagtag tagacttact tgctccttac 360
attaagggtg gtaagatcgg cctattcggg ggtgccggcg taggtaaaac agtattaatt 420
caggaattaa ttaacaacat cgcacaagag cacggtggta tctctgtatt cgctgggtga 480
ggtgagcgta ctcgtagagg taatgactta taccacgaaa tgagcgattc tggcgtaatc 540
aagaaaactg cgatggtatt cggacaaatg aacgagccac ctggagcacg tcaacgtggt 600
gcattaacag gtttaacaat ggctgagcat ttccgtgatg agcaaggaca agacgtactt 660
ctgttcacgc ataacatctt ccgtttcacg caagcgggtt ctgaagtatc tgcccttctt 720
ggtcgtatgc catctgcggg aggttaccaa ccaacacttg caacagaaat gggtc 775
```

<210> 1250

<211> 832

<212> DNA

<213> *Bacillus weihenstephanensis* strain WSBC 10204

```
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ttaacatttg aagttgcact tcatttaggt gatgacacag ttcgtacagt tgcatgtct 120
tccacagatg gacttggtcg tggcacagaa gtagaagata ctggtaaagc aatctctgta 180
ccagttggtg atgtaacact tggtcgcgta ttcaacgtat taggtgatgc aattgactta 240
gatggtgatg ttcctgcgga tgtacgtcgt gatccaattc accgtcaagc acctgcattc 300
gaagaactat ctacaagaat agaaattctt gaaactggta ttaaagtagt agatttactt 360
gctccttaca ttaagggtgg taagatcggg ctattcgggtg gtgccgggtg aggtaaaacg 420
gtattaattc aggaattaat taacaacatc gcacaagagc acggtgggtat ctctgtattc 480
gctggtgatg gtgagcgtac tctgaggggt aatgacttat accacgaaat gagcgattct 540
ggcgtaatta agaaaactgc gatggtattt ggacaaatga acgagccacc tggagcacgt 600
caacgtgttg cattaacagg ttttaacaatg gctgaacatt tccgtgatga gcaaggacaa 660
gacgtactat tgttcacgta taacatcttc cgtttcacgc aagcaggttc tgaagtatct 720
gcccttcttg gtcgtatgcc atctgcggta ggttaccaac caacacttgc aacagaaatg 780
ggtcaattac aagagcgtat tacatctaca aataaagggt ctatcacgtc ta 832
```

<210> 1251

<211> 802

<212> DNA

<213> *Bacillus thuringiensis* strain HER 1418

```

<400> 1251
aaatctacaa cgcccttacg gtaaaacaaa gcaacgaaaa cggaagtatt aacttaacat 60
ttgaagttgc acttcattta ggtgatgata cagttcgtac agttgcatg tcttccacag 120
atggacttgt tcgtggcaca gaagtagaag atactggtaa accaatctct gtaccagttg 180
gtgatgtaac acttggtcgc gtattttaacg tattaggtga tgcaattgac ttagatgggtg 240
aggttcctgc agatgtacat cgtgatccaa ttcaccgtca agcacctgca ttcgaagaat 300
tatctactaa agtagaaatt cttgaaactg gtattaaagt agtagactta cttgctcctt 360
acattaaggg tggtaagatc ggcctattcg gtggtgccgg cgtaggtaaa acagtattaa 420
ttcaggaatt aattaacaac atcgcacaa agcacggtgg tatctctgta ttcgctgggtg 480
taggtgagcg tactcgtgag ggtaatgact tataccacga aatgagcgat tctggcgtaa 540
tcaagaaaac tgcgatggta ttcggacaaa tgaacgagcc acctggagca cgtcaacgtg 600
ttgcattaac aggtttaaca atggctgagc atttccgtga tgagcaagga caagacgtac 660
ttctgttcat cgataacatc ttccgtttca cgcaagcggg ttctgaagta tctgcccttc 720
ttggtcgtat gccatctgcg gtaggttacc aaccaacact tgcaacagaa atgggtcaat 780
tacaagagcg tattacatct ac 802

```

```

<210> 1252
<211> 823
<212> DNA
<213> Bacillus thuringiensis strain HER 1410

```

```

<400> 1252
aaatctacaa cgcccttacg gtaaaacaaa gcaacgaaaa cggaagtatt aacttaacat 60
ttgaagttgc acttcattta ggtgatgata cagttcgtac agttgcaatg tcttccacag 120
atggacttgt tcgtggcaca gaagtagaag atactggtaa accaatctct gtaccagttg 180
gtgatgtaac acttggtcgc gtattttaacg tattaggtga tgcaattgac ttagatgggtg 240
aggttcctgc agatgtacat cgtgatccaa ttcaccgtca agcacctgca ttcgaagaat 300
tatctactaa agtagaaatt cttgaaactg gtattaaagt agtagactta cttgctcctt 360
acattaaggg tggtaagatc ggcctattcg gtggtgccgg cgtaggtaaa acagtattaa 420
ttcaggaatt aattaacaac atcgcacaa agcacggtgg tatctctgta ttcgctgggtg 480
taggtgagcg tactcgtgag ggtaatgact tataccacga aatgagcgat tctggcgtaa 540
tcaagaaaac tgcgatggta ttcggacaaa tgaacgagcc acctggagca cgtcaacgtg 600
ttgcattaac aggtttaaca atggctgagc atttccgtga tgagcaagga caagacgtac 660
ttctgttcat cgataacatc ttccgtttca cgcaagcggg ttctgaagta tctgcccttc 720
ttggtcgtat gccatctgcg gtaggttacc aaccaacact tgcaacagaa atgggtcaat 780
tacaagagcg tattacatct acaaataaag ggtctatcac gtc 823

```

```

<210> 1253
<211> 798
<212> DNA
<213> Bacillus cereus ATCC 13472

```

```

<400> 1253
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acatttgaag ttgcacttca tttaggtgat gatacagttc gtacagttgc gatgtcttcc 120
acagatggac ttgttcgtgg cacagaagta gaagatactg gtaaagcaat ctctgtacca 180
gttggtgatg caacacttgg acgtgtattc aacgtattag gtgatgcaat tgacttagat 240
ggtgaacttc ctgaggatgt acaccgtgat ccaattcacc gtcaagcacc tgcattcgaa 300
gaattatcta cttaaagtaga aattcttgaa actggtatta aagtagtaga cttacttgct 360
ccttacatta aggggtggtaa gatcggccta ttcgggtgggtg ccggcgtagg taaaacagta 420
ttaattcagg aattaatcaa taacatcgca caagagcatg gtggtatctc tgtattcgct 480
ggtgtaggtg agcgtactcg tgagggtaac gacttatacc acgaaatgag cgattctggc 540
gtaatcaaga aaactgcgat ggtattcgga caaatgaacg agccacctgg agcacgtcaa 600
cgtgttgcac taacaggttt aacaatggct gagcatttcc gtgatgagca aggacaagac 660
gtacttctgt tcatcgataa catcttccgt ttcacgcaag cgggttctga agtatctgcc 720
cttcttggtc gtatgccatc tgcggtaggt taccaaccga cacttgcaac agaaatgggt 780
caattacaag agcgtatt 798

```

```

<210> 1254
<211> 767
<212> DNA
<213> Bacillus cereus ATCC 7064

```

```
<400> 1254
catttgaagt tgcacttcat ttaggtgatg acacagttcg tacagttgca atgtcttcca 60
cagatggact tgttcgtggc acagaagtag aagatactgg taaagcaatc tctgtaccag 120
ttggtgatgc aacacttggg cgtgtattta acgtattagg tgatgcaatt gacttagatg 180
gtgaggttcc tgcggatgta cgtcgtgatc caattcaccc tcaagcacct gcattcgaag 240
aattatctac taaagtagaa attcttgaaa ctggtattaa agtagtagac ttacttgctc 300
cttacattaa ggggtggtaa atcgggtctat tccggtgggtc cgggtgtaggt aaaacgggat 360
taattcagga attaataaat aacatcgcac aagaacacgg tggatatctc gtattcgcgtg 420
gtgtaggtga gcgtactcgt gagggtaatg acttatacca cgaaatgagc gattctggcg 480
taattaagaa aactgcgatg gtattcggac aaatgaacga gccacctgga gcacgtcaac 540
gtgttgcggt aacaggttta acaatggctg agcatttccg tgatgagcaa ggacaagacg 600
tacttctgtt catcgataat atcttccgtt tcacgcaagc aggttctgaa gtatctgccc 660
ttcttggccg tatgccatct gcggtaggtt accaaccaac acttgcaaca gaaatgggtc 720
aattacaaga gcgtattaca tctacaaata aagggtctat cacgtct 767
```

```
<210> 1255
<211> 1174
<212> DNA
<213> Staphylococcus aureus strain C-14
```

```
<220>
<221> misc_feature
<222> (713)..(713)
<223> n represents any nucleotide
```

```
<400> 1255
gaaatgcgtg aatcattttt agattatgcg atgagtgtta tcgttgctcg tgcattgccca 60
gatgttcgtg acgggtttaa accagtagat cgctcgatat tatatggatt aaatgaacaa 120
ggtagacac cgataaaatc atataaaaaa tcagcacgta tcgttggtga cgtaatgggt 180
aaatatcacc ctcatgggtga cttatctatt tatgaagcaa tggtagctat ggctcaagat 240
ttcagttatc gttatccgct tgttgatggc caaggtaact ttgggtcaat ggatggagat 300
ggcgcagcag caatgcgtta tactgaagcg cgtatgacta aaatcacact tgaactgtta 360
cgtgatatta ataaagatac aatagatttt atcgataact atgatggtaa tgaagagag 420
ccgtcagctt tacctgctcg attccctaac ttattagcca atgggtgcac aggtatcgcg 480
gtaggatatt caacgaatat tccaccacat aacttaacag aattaatcaa tgggtgactt 540
agcttaagta agaaccctga tatttcaatt gctgagttaa tggaggatat tgaaggctc 600
gatttcccaa ctgctggact tatttttaggt aagagtggta ttagacgtgc atatgaaaca 660
ggctcgtggg caattcaaat gcgttctcgt gcagttattg aagaacgtgg agnccgacgt 720
caacgtattg ttgtcactga aattcctttc caagtgaata aggtcgtat gattgaaaaa 780
attgcagagc tcgttcgtga caagaaaatt gacggatatc ctgatttacg tgatgaaaca 840
agtttacgta ctgggtgtgc tgtcgttatt gatgtgcgta aggatgcaaa tgctagtgtc 900
attttaaata acttatacaa acaaacacct cttcaaacat catttgggtg gaatatgatt 960
gcacttgtaa atggttagacc gaagcttatt aattttaaag aagcgttggg acattatatta 1020
gagcatcaaa agacagttgt tagaagacgt acgcaatata acttacgtaa agctaaagat 1080
cgtgcccaca ttttagaagg attacgtatc gcacttgacc atatcgatga aattatttca 1140
acgattcgtg agtcagatac agataaagtt gcaa 1174
```

```
<210> 1256
<211> 780
<212> DNA
<213> Bacillus weihenstephanensis strain WSBC 10209
```

```
<400> 1256
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tttgaagttg cacttcattt aggtgatgac acagttcgta cagttgcaat gtcttccaca 120
gatggacttg ttcgtggcac agaagtagaa gatactggta aagcaatctc tgtaccagtt 180
ggtagtgtaa cacttgggtc tgtattttaa gatttaggtg atgcaattga cttagatgga 240
gatgttctcg cggatgtacg tcgtgatcca attcacgctc aagcgcctgc attcgaagag 300
ttatctacta aagtagaaat tcttgaaact ggtattaaag tagtagactt acttgctcct 360
tacattaagg gtggtaagat cgggtctattc ggtgggtgccc gtgtaggtaa aacagtatta 420
attcaggaat taatttaaca catcgacaaa gagcacggtg gtatctctgt attcgtggt 480
gtaggtagcg gtactcgtga aggtaacgac ttataccacg aaatgagcga ttctggcgta 540
attaagaaaa ctgcgatggg attcggacaa atgaacgagc cacctggagc acgtcaacgt 600
```


gttgcatataa cagggtttaac aatggctgaa catttccgtg atgagcaagg gcaagacgta 660
ctattgttca tcgataacat cttccgtttc acgcaagcgg gttctgaagt atctgccctt 720
cttggctgta tgccatctgc ggtagggttac cagccaacac ttgcaacaga aatgggtcaa 780

<210> 1257

<211> 817

<212> DNA

<213> Bacillus anthracis strain CIP 7700

<400> 1257

ctaccagaaa tctacaacgc ccttacggta aaacagagca acgaaaacgg aacaagcatt 60
aacttaacat ttgaagttgc acttcattta ggtgatgaca cagttcgtac agttgcaatg 120
tcttccacag atggacttgt tcgtggcaca gaagtagaag atactggtaa agcaatctct 180
gtaccagttg gtgatgcaac acttggctcg gtatttaacg tattagggtga tgcaattgac 240
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ttcgaagaat tatctactaa agtagaaatt cttgaaactg gtattaaagt agtagactta 360
cttgctcctt acattaaggg tggtaagatc ggtctattcg gtggtgccgg ttaggtaaaa 420
acgggtattaa ttcaggaatt aatcaataac atcgacacag aacacgggtg tatctctgta 480
ttcgtctgggtg taggtgagcg tactcgtgag ggtaatgact tataccacga aatgagcgat 540
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cgtcaacgtg ttgctgtaac aggtttaaca atggctgagc atttccgtga tgagcaagga 660
caagatgtac ttctgttcat cgataatatc ttccgtttca cgcaagcagg ttctgaagta 720
tctgcccttc ttggcgtat gccatctgcg gtaggttacc aaccaacact tgcaacagaa 780
atgggtcaat tacaagagcg tattacatct acaataa 817

<210> 1258

<211> 829

<212> DNA

<213> Bacillus thuringiensis strain HER 1404

<400> 1258

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acatttgaag ttgcacttca tttagggtgat gatacagttc gtacagttgc gatgtcttcc 120
acagatggac ttgttcgtgg cacagaagta gaagatactg gtaaaccaat ctctgtacca 180
gttgggtgat taacacttgg tcgcgtattt aacgtattag gtgatgcaat tgacttagat 240
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gaattatcta ctaaagtaga aattcttgaa actggtatta aagtagtaga cttacttgct 360
ccttacatta aggggtggtaa gatcggccta ttcgggtgggtg ccggcgtagg taaaacagta 420
ttaattcagg aattaattaa caacatcgca caagagcacg gtggtatctc tgtattcgct 480
gggtgtaggtg agcgtactcg tgagggtaat gacttatacc acgaaatgag cgattctggc 540
gtaatcaaga aaactgcat ggtattcgga caaatgaacg agccacctgg agcacgtcaa 600
cgtgttgcac taacagggtt aacaatggct gagcatttcc gtgatgagca aggacaagac 660
gtacttctgt tcatcgataa catcttccgt ttcacgcaag cgggttctga agtatctgcc 720
cttcttggtc gtatgccatc tgcggtaggt taccaaccaa cacttgcaac agaaatgggt 780
caattacaag agcgtattac atctacaaat aaagggtcta tcacgtcta 829

<210> 1259

<211> 844

<212> DNA

<213> Bacillus cereus ATCC 15816

<400> 1259

tgccggaag ctaccagaaa tctacaacgc ccttacggta aaacagagca acgaaaacgg 60
tgaacttaac ttaacatttg aagttgcact tcatttaggt gatgatacag ttcgtacagt 120
tgcatgtct tccacagatg gacttggtcg tggcacagaa gtagaagata ctggtaaagc 180
aatctctgta ccagttgggtg atgcaacact tggctgcgta tttaacgtat taggtgatgc 240
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aggtaaaaca gtattaattc aggagttaac caacaacatc gcacaagagc acgggtggtat 480
ctctgtattc gctgggtgtag gtgagcgtag tcgtgagggt aatgacttat accacgaaat 540
gagcgattct ggcgtaatta agaaaactgc gatgggtattc ggacaaatga acgagccacc 600
tgagagcagc caacgtgttg cattaacagg ctttaacaatg gctgaatatt tccgtgatga 660

gcaaggacaa gacgtacttc tgttcatcga taatatcttc cgtttcacgc aagcagggttc 720
tgaagtatct gcccttcttg gccgtatgcc atctgcggta ggttaccaac caacacttgc 780
aacagaaatg ggtcaattac aagagcgtat tacatctaca aataaagggc ctatcacgtc 840
tatac

<210> 1260

<211> 840

<212> DNA

<213> *Bacillus cereus* ATCC 49064

<400> 1260

aagctaccag aaatctacaa cgcccttacg gtaaaacaga gcaacgaaaa cggaaacaagc 60
attaacttaa catttgaaat tgcacttcat ttaggtgatg acacagttcg tacagttgca 120
atgtcttcca cagatggact tgttcgtggc acagaagtag aagatactgg taaagcaatc 180
tctgtaccag ttggtgatgc aacacttggc cgtgtattta acgtattagg tgatgcaatt 240
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gcattcgaag aattatctac taaagtagaa attcttgaaa ctggtattaa agtagtagac 360
ttacttgctc cttacattaa ggggtggaag atcgggtctat tgggtggtgc cgggttaggt 420
aaaacagtat taattcagga attaatcaac aacatcgcac aagaacacgg tgggtatctc 480
gtattcgcgt gtgtaggtga gcgtactcgt gagggtaatg acttatacca cgaaatgagc 540
gattcaggcg taattaagaa aactgcgatg gtattcggac aaatgaacga gccacctgga 600
gcgcgtcaac gtgttcggtt aacagggtta acaatggctg agcatttccg tgatgagcaa 660
ggacaagacg ttcttctggt catcgataat atcttccgtt tcacgcaagc aggttctgaa 720
gtatctgccc ttcttggtcg tatgccatct gcggtaggtt accaaccaac acttgcaaca 780
gaaatgggtc aattacaaga gcgtattaca tctacaaata aagggtctat cacgtctatc 840

<210> 1261

<211> 839

<212> DNA

<213> *Bacillus thuringiensis* strain BGSC 4AZ1

<400> 1261

gcggaaagct accagaaatc tacaatgccc ttacggtaaa acaaagcaac gaaaacggaa 60
gcatgaactt aacatttgaa gttgcacttc atttaggtga tgatacagtt cgtacagttg 120
cgatgtcttc cacagatgga cttgttcgtg gcacagaagt agaagatact ggtaaagcaa 180
tctctgtacc agttggtgat gcaacacttg gacgtgtatt caacgtatta ggtgatgcaa 240
ttgacttaga tgggtgaactt cctgcggatg tacaccgtga tccaattcac cgtcaagcac 300
ctgcattcga agaattatct actaaagtag aaattcttga aactgggtatt aaagtagtag 360
acttacttgc tccttacatt aagggtggta agatcggcct attcgggtggt gccggcgtag 420
gtaaaacagt attaatcag gagttaatca ataacatcgc acaagagcac ggtggtatct 480
ctgtattcgc tgggtgtaggt gagcgtactc gtgagggtaa tgacttatac cacgaaatga 540
gcgattctgg cgtaatacaag aaaactgcga tgggtattcgg acaaatgaac gagccacctg 600
gagcacgtca acgtgttgca ttaacaggtt taacaatggc tgagcatttc cgtgatgagc 660
aaggacaaga cgtacttctg ttcacgcata acatcttccg ttccacgcaa gcgggttctg 720
aagtatctgc ctttcttggc cgtatgccat ctgcggtagg ttaccaacca acacttgcaa 780
cagaaatggg tcaattacaa gagcgtatta catctacaaa taaaggtct atcacgtct 839

<210> 1262

<211> 833

<212> DNA

<213> *Bacillus thuringiensis* strain BGSC 4H2

<400> 1262

aagctaccag aaatctacaa tgcccttacg gtaaaacaaa gcaacgaaaa cggaaagcatg 60
aacttaacat ttgaagttgc acttcattta ggtgatgata cagttcgtac agttgcgatg 120
tcttccacag atggacttgt tcgtggcaca gaagtagaag atactggtaa agcaatctct 180
gtaccagttg gtgatgcaac acttggacgt gtattcaacg tattaggtga tgcaattgac 240
ttagatgggt aacttctctg ggatgtacac cgtgatccaa ttcaccgtca agcacctgca 300
ttcgaagaat tatctactaa agtagaaatt cttgaaactg gtattaaagt agtagactta 360
cttgctcctt acattaaggg tggtaagatc ggcctattcg gtggtgccgg cgtaggtaaa 420
acagtattaa ttcaggaatt aatcaataac atcgacaaag agcacgggtg tatctctgta 480
ttcgtgggtg taggtgagcg tactcgtgag ggtaatgact tataccacga aatgagcgat 540
tctggcgtaa tcaagaaaac tgcgatggta ttcggacaaa tgaacgagcc acctggagca 600

```
cgtaaacgtg ttgcattaac aggtttaaca atggctgagc atttccgtga tgagcaagga 660
caagacgtac ttctgttcat cgataacatc ttccgtttca cgcaagcggg ttctgaagta 720
tctgcccttc ttggctgtat gccatctgcg gtaggttacc aaccaacact tgcaacagaa 780
atgggtcaat tacaagagcg tattacatct acaaataaag ggtctatcac gtc 833
```

<210> 1263
<211> 790
<212> DNA
<213> *Bacillus thuringiensis* strain BGSC 4Q1

```
<400> 1263
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tcgtacagtt gcgatgtctt ccacagatgg acttggtcgt ggcacagaag tagaagatac 120
tggtaaagca atttctgtac cagttgggtga tgtaacactt ggacgtgtat tcaacgtatt 180
aggtgatgca attgacttag atgggtgaact tcctgcggat gtacaccgtg atccaattca 240
ccgtcaagca cctgcattcg aagaattatc tactaaagta gaaattcttg aaactggat 300
taaagtagta gacttacttg ctctttacat taagggtggg aagatcggcc tattcgggtg 360
tgccgggtga ggtaaaacag tattaattca ggaattaatt aacaacatcg cacaagagca 420
cggtgggtat tctgtattcg ctggtgtagg tgagcgtact cgtgagggtg atgacttata 480
ccacgaaatg agcgattctg gcgtaatcaa gaaaactgcg atgggtattcg gacaaatgaa 540
cgagccacct ggagcacgtc aacgtgttgc attaacaggt ttaacaatgg ctgagcattt 600
ccgtgatgag caaggacaag acgtacttct gttcatcgat aacatcttcc gtttcacgca 660
agcgggttct gaagtatctg cccttcttgg tcgtatgcca tctgcggtag gttaccaacc 720
aacacttgca acagaaatgg gtcaattaca agagcgtatt acatctacaa ataaagggtc 780
tatcacgtct 790
```

<210> 1264
<211> 644
<212> DNA
<213> *Bacillus thuringiensis* strain HER 1232

```
<400> 1264
agttgcactt catttaggtg atgatacagt tcgtacagtt gcgatgtctt ccacagatgg 60
acttggtcgt ggcacagaag tagaagatac tggtaaacca atctctgtac cagttgggtga 120
tgtaacactt ggctcgcgtat ttaacgtatt aggtgatgca attgacttag atgggtgaggt 180
tctgcagat gtacatcgat atccaattca ccgtcaagca cctgcattcg aagaattatc 240
tactaaagta gaaattcttg aaactggat taaagtagta gacttacttg ctctttacat 300
taagggtggg aagatcggcc tattcgggtg tgccggcgta ggtaaaacag tattaattca 360
ggaattaatt aacaacatcg cacaagagca cggtgggtat tctgtattcg ctggtgtagg 420
tgagcgtact cgtgagggtg atgacttata ccacgaaatg agcgattctg gcgtaatcaa 480
gaaaactgcy atgggtattcg gacaaatgaa cgagccacct ggagcacgtc aacgtgttgc 540
attaacaggt ttaacaatgg ctgagcattt ccgtgatgag caaggacaag acgtacttct 600
gttcatcgat aacatcttcc gtttcacgca agcgggttct gaag 644
```

<210> 1265
<211> 823
<212> DNA
<213> *Bacillus anthracis* ATCC 4229

```
<400> 1265
ggcggaaagc taccagaaat ctacaacgcc cttacggtaa aacagagcaa cgaaaacgga 60
acaagcatta acttaacatt tgaagttgca cttcatttag gtgatgacac agttcgtaca 120
ggttgcaatgt cttccacaga tggacttggt cgtggcacag aagtagaaga tactggtaaa 180
gcaatctctg taccagttgg tgatgcaaca cttggctcgtg tatttaacgt attaggtgat 240
gcaattgact tagatgggtga ggttcctgcy gatgtacgtc gtgatccaat tcaccgtcaa 300
gcacctgcat tcgaagaatt atctactaaa gttagaaattc ttgaaactgg tattaagta 360
gtagacttac ttgctcctta cattaagggt ggtaagatcg gtctattcgg tgggtgccgg 420
gtaggtaaaa cgggtattaat tcaggaatta atcaataaca tcgcacaaga acacgggtgg 480
atctctgtat tcgctgggtg aggtgagcgt actcgtgagg gtaatgactt ataccacgaa 540
atgagcgatt ctggcgtaat taagaaaact gcgatgggtat tcggacaaat gaacgagcca 600
cctggagcac gtcaacgtgt tgcgttaaca ggtttaacaa tggctgagca tttccgtgat 660
gagcaaggac aagatgtact tctgttcatc gataatatct tccgtttcac gcaagcaggt 720
tctgaagtat ctgcccttct tggccgtatg ccatctgcgg taggttacca accaacactt 780
```

gcaacagaaa tgggtcaatt acaagagcgt attacatcta caa

823

<210> 1266
<211> 715
<212> DNA
<213> *Paracoccidioides brasiliensis* ATCC 200443

```
<400> 1266
tgggtccgagr cccgattcma tgaaattatc aaggaaacct ccaayttcat taagaagggtc 60
ggatataacc ccaagactgt tcctttcgtt cccatttctg gtttccaggg tgacaacatg 120
atcgatscct ctgccaactg cccatgggtac aagggctggt acmakgagac tgccgacagg 180
caagyactct ggcaagaccc ttcttgaggc cattgacgsc attgagcccc ccamscgctc 240
twccgataaa cctctccgtc ttctctctca ggatgtctac aagatctccg gtattggmac 300
tggtccctgtc ggacgtrttg agactggagt catcaagccc ggtatgggtc tgaccttcgc 360
tcccgcacac gtcaccactg aagtcaagtc cgttgaaatg caccaccagc agctttccga 420
cggtawcccc ggtgacaacg tcggcttcaa cgtcaagaat gtttccgtca aagaagtccg 480
ccgtggtaac gttgctggtg gactctaaga atgatcccgc mawgggctgc gattccttca 540
atgcyaggtg catcgctcctc aaccaccctg gtcagggttg cgctgggtat gcccaggtcc 600
tcgaytgcca tactgcccac attgcytgca arttcgctga gmtcmakgag aagattgayc 660
gccgaaccgg maagtctgtt gagaacgccc ccaagttcat caagtccggt gatgc 715
```

<210> 1267
<211> 875
<212> DNA
<213> *Blastomyces dermatitidis* ATCC 56220

```
<400> 1267
gagtcctctt atttactttt gtcattgacta ccttactaat ctgtcataga tcgttacaac 60
gaaatcgctc aggagacttc caacttcata aagaagggtc gatacaaccc caagaacgtt 120
cctttcgttc ctatctccgg tttcaacggc gacaacatgc ttgagccctc cccaactgc 180
ccctgggtaca agggttggga gaaggagacc aaggccggta aggtcactgg taagaccctc 240
ctcgaggcca tcgacgccat tgagccccct acccgctccg ccaacaaggt cagtactacc 300
tcaattactt gaactctctt catacgttcc gattactgac tgcttcacag cccctccgtc 360
ttcccctcca ggacgtttac aagatcggtg gtattggaac ggtgcccgtc ggtcgtgttg 420
agaccgggtc catctccccct ggtatggtcg ttaccttgta tgtatcctga ccatccccct 480
tggcaatcat tacgtactaa ctactcttc agcgctcccg ccaacgtcac cactgaagtc 540
aagagtgttg aaatgcacca ccagcagctc gctgcccgtc agcccgggtg caacgttggt 600
ttcaacgtga agaacgtctc cgtcaaggaa atccgctcgt gtaacgttgc tgggtgatagc 660
aagaacgacc cccctgcccg tgctgcttcc ttcaacgccc aggtcatcgt cctcaaccac 720
cccggtcagg tcgggtgctg ttacgccccca gtccttgact gccacactgc ccacattgct 780
tgcaagttct ctgaactcct tgagaagatt gaccgtcgta ccggaaagtc tgttgaggac 840
caccccaagt tcatcaagtc cggtagcgtg gccat 875
```

<210> 1268
<211> 1124
<212> DNA
<213> *Histoplasma capsulatum* strain WSA-377

```
<400> 1268
gtgagcgtgg tatcaccatc gatattgccc tctggaaatt cgagaccccc aagtacagtg 60
tactgtcatc tgggtgagtgc tttttacccc tcttaagcag atttcaactt ccagagtatc 120
tactctaaca tatccgctta gatgtctccc gccatcgta cttcatcaag aacatgatca 180
ctgggtacct ccaggctgac tgcgctatcc tcatcattgc tgccgggtact ggtgagttcg 240
aggctgggtat ctccaaggat ggccagactc gtgagcacgc tctgcttgct ttcacccttg 300
gtgtgaggca actcatcggt gccatcaaca agatggacac caccaagtgg tccgagtcctc 360
gtttcaacga aatcatcaag gaggtttcca acttcatcaa gaaggctcga tataacccca 420
aggctgttcc ctctcggtgca atctctgggt tcgagggtga caacatgatt gaaccctccc 480
ccaaactgcac ctgggtacaag ggctggaaca aggagactgc ctctggcaag tcttctggta 540
aaacccttct cgatgccatt gacgccattg aacccccaac ccgtcctacc gataagcctc 600
tccgtcttcc cctccaggat gtttacaaaa tctctgggtat tggcactgtt cccgtcggac 660
gtgttgagac tgggtgtcatc aagcccggta tcgaggtgac tttcgctccc tccaacgtca 720
ccactgaagt caagtccgtc gagatgcacc accaacaact ccaggctgggt taccctgggtg 780
acaacgtcgg cttcaacgtc aagaacgttt cagtcaagga agtccgccgt ggcaacgttg 840
```

```
ctggcgactc caaaaatgat cccccaagg gctgcgaatc cttcaatgcc caggtcatcg 900
tccttaacca ccccgccag gttggcgctg gttatgcccc agtcctcgac tgccacactg 960
cccacattgc ttgcaagttc tctgaactca ttgagaagat cgaccgccgt actggaaagt 1020
ctgttgagaa caacccaag ttcacaaagt ctggtgatgc tgctatcgtc aagatgggtc 1080
cctccaagcc catgtgcgtg gagcccttca ctgactatcc ccct 1124
```

<210> 1269
<211> 1043
<212> DNA
<213> *Trichophyton rubrum* strain WSA-224

<220>
<221> misc_feature
<222> (693)..(693)
<223> n represents any nucleotide

```
<400> 1269
gtgagcgtgg tatcaccatc gatatcgccc tctggaagtt cgagaccccc aagtacaatg 60
tcaccgtcat tggatatgtt ctttgccttg ttccctcatg tggttgtacc atatctaacg 120
agagtagacg ccccggttca ccgtgacttc atcaagaaca tgatcactgg tacctcccag 180
gctgactgcg ctattctcat cattgctgcc ggtactggtg agttcgaggg tggtatctcc 240
aaggatggcc agaccctga gcacgctctg ctgccttca ccctcggtgt caagcagctc 300
atcggttgcca tcaacaagat ggacaccacc ggctgggtccg aggatcggtt caaggaaatt 360
atcaaggaag tcaccaactt catcaagaag gttgggtacg accccaaggg tgttccattc 420
gttccaatct ctggtttcaa cggtgacaac atgattgagg cctccaccaaa ctgcccattg 480
tacaagggat ggaacaagga gaccaaggcc ggtggtgcca agtcgggcaa gacctctctc 540
gaggccatcg atgccatcga catgccaaacc cgctctaccg acaagcccct ccgtctccca 600
ctccaggatg tctacaagat ctctgggtatc ggaactgtgc cagtcgggtcg tgttgagacc 660
ggtatcatca agcccggat ggtcgtcacc ttngcccccg ccaacgtcac cactgaagtc 720
aagtcgctyk aaatgcacca ccagcagctt cagcagggtg tcccgggtga caacgtcggc 780
ttcaatgtca agaacgtttc cgtaaggaa gtccgcccgtg gtaacgttgc cggtgactcc 840
aagaacgacc caccatccgg ctgtgcctcc ttcaacgccc aggtcatygt cctcaaccac 900
cccggccaga tcggtgctgg ttacgstcca gtccctgact gccacactgs tcacattgct 960
tgcaagttcg ctgagctcct cgagaagatt gaccgccgta ccggtaaatc cgtcgaagcc 1020
aaccccaagt tcgtcaagtc tgg 1043
```

<210> 1270
<211> 1105
<212> DNA
<213> *Microsporum canis* strain WSA-217

```
<400> 1270
gctgagcgtg agcgtggtat caccattgat atcgccctct ggaagttcga gacccccaag 60
tacatgggtca ccgtcatcgg tatgctttat ctgtttccca tttatagttg cgaccagtaa 120
ctaacaaaaa gtagatgccc ccgggcaccg tgacttcatc aagaacatga ttactgggtac 180
ctcccaggcc gactgcgcta ttctcatcat tgctgcccgt actggtgagt tcgaggctgg 240
tatctccaag gatggccaga ctctgtgagca cgccctgctc gctttcacc tcggtgtcaa 300
gcagctcatc gttgccatca acaagatgga caccaccaac tgggtctgagt cccgtttcgg 360
tgaaatcatc aaggaagtca ccaacttcat caagaaggtc ggctacgacc ccaaggggtgt 420
cccattcgct ccaatctctg gcttcaacgg tgacaacatg attgagccct ccaccaactg 480
cccattggtac aagggatgga acaaggagac caaggccggg ggcaaatcct ctggtaagac 540
cctccttgag gccatcgtat ccattgacat gccactcgt cccaccgaca agcctctccg 600
tctcccactc caggatgtct acaagatctc tgggtatcgga acagtaccag tcggtcgtgt 660
tgagactggg atcatcaagc ctgggtatggg tgctacttty gcccccgcca acgtcaccac 720
tgaagtcaag tccgtcgaaa tgcaccacca gcagctygtc cagggtgttc ccggtgacaa 780
cgttggcttc aacgtcaaga acgtytctgt caaggaagtc cgccgtggta acgttgccgg 840
tgattccaag aacgaccac cagctggctg ccctctttc aaggcccagg tcactcgtcct 900
caaccacccc ggccagatcg gtgctgggta cgccccagtc cttgactgcc aactgcccc 960
cattgcttgc aagttctctg agcttcttga gaagattgac cgccgtactg gtaaattccgt 1020
cgaaaccagc cctaagttcg tcaagctcgt tgatgccgct attgccacca tggttccatc 1080
caagcccatg tgcgttgagg ctttc 1105
```

<210> 1271
<211> 1244
<212> DNA
<213> *Aspergillus versicolor* strain WSA-175

<400> 1271
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gaggtcaccg tcattggtat gttgtccttc ttgtgttacc atcgaaacat atctaacctt 120
caactgcaga cgccccgggt caccgtgact tcatcaagaa catgatcact ggtacctccc 180
aggccgactg cgctattctc atcattgctt ccggtactgg tgaattcgag gctgggtatct 240
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tcatcgttgc cctcaacaag atggacactg ctgggtgggc tgaggctcgt tacaacgaaa 360
tcgtcaagga aacttccggt ttcatcaaga aggtcggcta caaccccaag tcggttccct 420
tcgtcccat ctccggtttc aacggtgaca acatgcttga gccctcctcc aactgcccct 480
ggtacaaggg ttggggagaag gagaccaagg ctggtaaggc cactggtaag accctcctcg 540
aggccatcga cgccattgag cctcccgtcc gtcccctcaa caagcctctc cgtcttcccc 600
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gtaccatcgt ccccggtatg gtcgtcacct tcgctcccgc caacgtcacc actgaagtca 720
agtccgttga gatgcaccac cagcagctca aggagggtgt tcccggtkac aacggttggt 780
tcaacgtgaa gaacgtttcc gtcaaggaag tccgcccgtg taacgtcgct ggtgactcca 840
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gcaagttcgc tgagctccag gagaagatcg accgcccgtac cggaaagtct gtcgaatytg 1020
cccccaagtt catcaagtct ggtgacgcgc ctatcgtcaa gatgattccc tccaagccca 1080
tgtgtgtcga gtctttcact gactaccctc ctytcggccg ttccgcccgtc cgtgacgtaa 1140
gttctttccc cagcttttctg atgctaccct tctmtgaatc acgtgtcatg tcttggcacc 1200
cgcccatcac atgaccacgc aacctatata cccgccacac cctt 1244

<210> 1272
<211> 1032
<212> DNA
<213> *Exophiala moniliae* strain WSA-219

<400> 1272
gctgagcgtg agcgtggtat caccatcgat atcgctctctt ggaagttcga gaccccccaag 60
tactatgtca ccgtcatcga cgccccgggt catcgtgact tcatcaagaa catgatcact 120
ggtacttccc aagctgactg cgccattctc atcattgctg ccggtactgg tgaattcgaa 180
gccggtatct ccaaggatgg tcagaccggt gagcacgctc tgcttgccca caccctgggt 240
gtcaagcagc tcattgtcgc catcaacaag atggacacta ccaagtgggc tgaggaccgt 300
ttcaacgaaa tcatcaagga gacttccagc ttcataaga aggtcggcta caaccccaag 360
tcggttccct tcgtcccat ctccggcttc aacggtgaca acatgatcga cgtctccacc 420
aactgcccct ggtacaaggg ctggggagaag gagaccaagg ctggcaaggc ctctggcaag 480
actctccttg aggccatcga cgccattgac cccccctctc gtcccaccga caagcctytct 540
cgtctccctc tccaggatgt gtacaagatc tctgggtatg gaacggtgcc cgtcggtcgt 600
gtcgagactg gtatcatcaa ggccggtatg gtcgttacct tcgctcctgc caacgtcacc 660
actgaagtca agtccgtcga aatgcaccac gaacagctcg ccgagggtgt tccagggtgac 720
aacgtcggtt tcaacgtcaa gaacgtytcc gtcaaggagg ttcgtcgtgg aaacgtttgc 780
ggtgactcca agaacgaccc acccaagggc gctgattcct tcaacgccc ggtcatcgtc 840
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cacattgctt gcaagttctc tgagcttctc gagaagatcg atcgctcgkac cggaaagtgc 960
atcgaaaaca accccaagtt catcaagtct ggtgacgctg ccacgtcaa gatggttccc 1020
agcaagccca tg 1032

<210> 1273
<211> 1106
<212> DNA
<213> *Hortaea werneckii* ATCC 34944

<400> 1273
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tatccgggtcc ttttttggtta atttaccaga aatgacgaaa tttttgacta attaacacac 120
tcagaccgtc attgacgccc cgggtcaccg tgacttcata aagaacatga tcaactggtac 180
ctcccaggcc gactgcgctg tctcatcat tgctgccggt actggtgagt tcgaggctgg 240
tatctccaag gatggccaga cccgtgagca cgccctgctc gcctacacc tcggtgtcaa 300

gcagctcatc	gtcgccatca	ataagatgga	caccaccaag	tgggtccgagg	agcgttacgg	360
cgagatcatc	aaggagacct	ctgccttcac	caagaagggtc	ggttttcaacc	cgaagcacgt	420
cccgttcgtc	ccgatctccg	gtttcaacgg	tgacaacatg	atcgaggcct	ycaccaactg	480
cccgtggtac	aagggctggg	agaaggagac	caaggccaag	gtcaccggca	agaccctyct	540
tgaggccatt	gacaacatcg	acccgccgag	ccgtccttcc	gacaagccgc	tccgtcttcc	600
cctccaggat	gtctacaaga	tgggtggtat	tgggacagtc	ccagtcggcc	gtgtcgagac	660
cggtaccatc	aaggccggca	tgggtcggtac	cttcgctccg	gctggtgtca	ccactgaagt	720
gaagtccgtt	garatgcacc	acgagcagct	cgctgagggt	ytgccgggtg	acaacgtcgg	780
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caaggctgac	ccgccgaagg	gctgcgcacg	cttcaacgcc	caggtcatcg	tcctgaacca	900
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ctgcaagttc	ggcgagctcc	tcgagaagat	cgaccgtcgc	tytggaagat	ccattgaagc	1020
ctygcctaag	tacatcaagt	ctggtgacgc	tgccatygtc	aagatgattc	cgtccaagcc	1080
gatgtgcgtt	gagccattca	ctgagt				1106

<210> 1274

<211> 1119

<212> DNA

<213> *Fusarium solani* ATCC 32793

<400> 1274

ctcaaggccg	agcgtgagcg	tggatcacc	atcgacattg	ccctctggaa	gttcgagact	60
ccccgctact	atgtcacctg	cattgggtatg	ttgctgtcac	ctctctcaca	catgtctcac	120
cactaacaat	caacagacgc	ccccggccac	cgtgatttca	tcaagaacat	gatcactggt	180
acttcccagg	ccgactgcgc	cattctcatc	attgccgcgc	gtactggtga	gttcgaggct	240
ggtatctcca	aggatggcca	gaccctgag	cacgccctgc	tcgctacac	cctcggtgtc	300
aagaacctca	ttgtcgccat	caacaagatg	gacaccacca	agtgggtccga	gtcccgttac	360
caggagatca	tcaaggagac	ctccaacttc	atcaagaagg	tcggctacaa	ccccaggct	420
gtcgctttcg	tccccatctc	cggtttcaac	ggcgacaaca	tgcttactcc	ctccaccaac	480
tgcccctggg	acaagggtcg	ggagcgtgag	atcaagtcgc	gcaagctcac	tggcaagacc	540
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gagtcgcgcc	ccaagttcat	caagtctggt	gactccgcca	tcgtcaagat	ggttccccct	1080
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<210> 1275

<211> 1113

<212> DNA

<213> *Aureobasidium pullulans* strain WSA-234

<400> 1275

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<210> 1276
<211> 731
<212> DNA
<213> *Blastomyces dermatitidis* ATCC 14112

<400> 1276
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tcaagatgat t 731

<210> 1277
<211> 1046
<212> DNA
<213> *Exophiala dermatitidis* ATCC 76088

<400> 1277
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<210> 1278
<211> 1109
<212> DNA
<213> *Fusarium moniliforme* strain WSA-213

<400> 1278
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<210> 1279

<211> 765

<212> DNA

<213> *Aspergillus terreus* strain WSA-174

<400> 1279

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<210> 1280

<211> 1105

<212> DNA

<213> *Aspergillus fumigatus* ATCC 64746

<400> 1280

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<210> 1281

<211> 1343

<212> DNA

<213> *Cryptococcus laurentii* ATCC 44096

<400> 1281

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<210> 1282

<211> 734

<212> DNA

<213> *Emmonsia parva* ATCC 10784

<400> 1282

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<210> 1283

<211> 1107

<212> DNA

<213> *Fusarium solani* ATCC 62877

<400> 1283

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<210> 1284

<211> 1045

<212> DNA

<213> *Sporothrix schenckii* ATCC 14285

<400> 1284

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<210> 1285

<211> 764

<212> DNA

<213> *Aspergillus nidulans* strain WSA-176

<400> 1285

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<210> 1286

<211> 971

<212> DNA

<213> *Cladophialophora carrionii* ATCC 16264

<400> 1286

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<210> 1287
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 <213> *Exserohilum rostratum* strain WSA-215

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ccactggtaa gaccctcctt gaggccattg acgccatcga ccctcccagc cgtcctaccg 240
acaagccctt ccgtcttccc ctccaggatg tctacaagat tgggtggtatt ggcacgggtt 300
ccgtcggctg tgctcgagacc ggtatcatca aggccggtat ggtcgtcacc ttcgcccccg 360
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tccccggtga caacgtcggc ttcaacgtca agaacgtctc cgtcaaggag atccgtcgtg 480
gtaacgttgc cggtgactcc aagaacgacc cccccaaggg ctgcgagtct ttcaacgctc 540
aggtcattgt cctcaaccac cctgggtcagg tcggtgcccg ttacgcgcca gtctcgcact 600
gccacaccgc ccacattgcc tgcaagttct ctgagctcct cgagaagatt gaccgcccgt 660
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agatggttcc ct
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<210> 1288
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 <212> DNA
 <213> *Bacillus thuringiensis* strain HER 1236

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tgacattatc gtaattgact ctgtagcagc tcttgtagcg aaagcagaga ttgaaggcga 180
tatgggtgac tcacacgtag gtttacaagc acgtttaatg tcacaagcac ttmgtgaagc 240
ttcaggagca atcaacaaat carrarcaat wgcaatcttt attaaccaaa ttcgwgaaaa 300
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<210> 1289
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 <212> DNA
 <213> *Bacillus thuringiensis* strain HER 1232

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tgacattatc gtaattgact ctgtagcagc tcttgtagcg aaagcagaga ttgaaggcga 180
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<400> 1290
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<210> 1291
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<213> Artificial Sequence

<220>
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Oligonucleotide

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<223> n represents a modified base

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<400> 1291
gcnytnccng aygtnmgnga ygg

23

<210> 1292
<211> 20
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Oligonucleotide

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<222> (18)..(18)

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<222> (12)..(12)

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<222> (18)..(18)

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<400> 1292

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20

<210> 1293

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1293

atggctgaat tacctcaatc

20

<210> 1294

<211> 25

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:
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<400> 1294

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25

<210> 1295

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<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
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<210> 1296
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<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1296
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<210> 1297
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<400> 1297
cgtcaacat tgaggaagag ct 22

<210> 1298
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<212> DNA
<213> Artificial Sequence

<220>
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Oligonucleotide

<400> 1298
acgaaatcga ccgtctcttt ttc 23

<210> 1299
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<212> DNA
<213> Staphylococcus aureus strain 601055

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ggttttaaacc cagtacatcg tcgtatacta tatggattaa atgaacaagg tatgacaccg 180
gataaatcat ataaaaaatc agcacgtatc gttgggtgacg taatgggtaa atatcaccct 240
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tcagatgaag	atgaagaata	a				2661

<210> 1300

<211> 2628

<212> DNA

<213> Escherichia coli strain K12

<400> 1300

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Oligonucleotide

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<223> n represents a modified base

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<223> n represents a modified base

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<222> (15)..(15)
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23

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Oligonucleotide

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<400> 1302
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23

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<220>
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Oligonucleotide

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<223> i

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<210> 1304

<211> 19

<212> DNA

<213> Artificial Sequence

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Oligonucleotide

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<223> n represents a modified base

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<222> (8)..(8)

<223> i

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19

<210> 1305
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<212> DNA
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<220>
<223> Description of Artificial Sequence:
Oligonucleotide

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22

<210> 1306
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Oligonucleotide

<400> 1306
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22

<210> 1307
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23

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Oligonucleotide

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<213> Staphylococcus aureus strain RN4220

<400> 1328
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gttcgtaaaa gacctggtat gtatatggga tcaactgata aacggggatt acatcatcta 120
gtatatgaaa ttgtcgataa ctccgctgat gaagtattga atgggttacgg taacgaaata 180
gatgtaacaa ttaataaaga tggtagtatt tctatagaag ataatggacg tggatatgcca 240
acaggtatac ataaatcagg taaaccgaca gtcgaagtta tctttactgt ttacatgca 300
ggaggtaaat ttggacaagg cggctataaa acttcagggtg gtcttcacgg tgttggtgct 360
tcagttgtaa atgcattgag tgaatggcct gaagttgaaa tccatcgaga tggtaataa 420
tatcatcaaa gttttaaaaa cgggtggttcg ccatcttctg gtttagtgaa aaaaggtaaa 480
actaagaaaa caggtaacca agtaacattt aaacctgatg acacaatttt taaagcatct 540
acatcattta attttgatgt tttaagtga cgactacaag agtctgcgtt cttattgaaa 600
aatttaaaaa taacgcttaa tgatttacgc agtggttaaag agcgtcaaga gcattaccat 660
tatgaagaag gaatcaaaga gtttgttagt tatgtcaatg aaggaaaaga agttttgcat 720
gacgtggcta cattttcagg tgaagcaa atttgtaaata atgtacgtac ttaagatggt 780
aatgatcaat attcagaaag tattttaagt tttgtaaaata atgtacgtac ttaagatggt 840
ggtacacatg aagttgggtt taaaacagca atgacacgtg tatttaataga ttatgcacgt 900
cgtattaatg aacttaaaac aaaagataaa aacttagatg gtaatgatat tcgtgaagggt 960
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cttaataaat	tgcaaaaaga	acttggtaaa	ggcttcacgt	tacaacgtta	caaagggttg	1740
ggtgaaatga	accctgagca	attatgggaa	acgacgatga	acccagaaac	acgaacttta	1800
attcgtgtac	aagttgaaga	tgaagtgcgt	tcatactaac	gtgtaacaac	attaatgggt	1860
gacaaagtac	aacctagacg	tgaatggatt	gaaaagcatg	ttgagtttgg	tatgcaagag	1920
gaccaaagta	ttttagataa	ttctgaagta	caagtgcctg	aaaatgatca	atttgatgag	1980
gaggaaatct	ag					1992

<210> 1329
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1329	25
tgtagagcgc ggtatcatca aagta	

<210> 1330
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1330	22
agattcgaac ttggtgtgcg gg	

<210> 1331
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1331	30
gcccttgagg tacagaatgg taatgaagtt	

<210> 1332
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1332	20
gaccgcggcg cagaccatca	

<210> 1333
 <211> 23
 <212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1333

tcatggtgac ttatctatatt atg

23

<210> 1334

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1334

catctatttta taaagcaatg gta

23

<210> 1335

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1335

ctatttatgg agcaatggt

19

<210> 1336

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1336

tggagactac tcagtgt

17

<210> 1337

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1337

tggagacttc tcagtgt

17

<210> 1338

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1338
gtgtacggag caatg 15

<210> 1339
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1339
ccagcggaaa tgcgt 15

<210> 1340
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1340
gaacaaggta tgacaccgga taaat 25

<210> 1341
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1341
gataactgaa atcctgagcc atacg 25

<210> 1342
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1342
gatggtattg gtcaatatca tcca 24

<210> 1343
<211> 29
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1343
aagaaactgt ctctttatta atatcacgt 29

<210> 1344
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1344
agcagcaacg atgttacgca gcag 24

<210> 1345
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1345
cccgccgagc atttcaacta ttg 23

<210> 1346
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1346
gatgttacgc agcagggcag tc 22

<210> 1347
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1347
accaagcagg ttcgcagtca agta 24

<210> 1348
<211> 750
<212> DNA
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: Unidentified

bacterium

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<400> 1348
atgcgctcac gcaactggtc cagaaccttg accgaacgca gcggtggtaa cggcgagtg 60
gcggttttca tggcttggtta tgactgtttt tttgtacagt ctatgcctcg ggcattccaag 120
cagcaagcgc gttacgccgt gggtcgatgt ttgatgttat ggagcagcaa cgatgttacg 180
cagcagggca gtcgccctaa aacaaagtta ggccgcgatg acacaacgca ggtcacattg 240
atacacaaaa ttctagctgc ggcagatgag cgaaatctgc cgctctggat cgggtgggggc 300
tgggcgatcg atgcacggct agggcggtga acacgcaagc acgatgatat tgatctgacg 360
tttcccgcg agaggcgcg cgagctcgag gcaatagttg aaatgctcgg cgggcgcgctc 420
atggaggagt tggactatgg attcttagcg gagatcgggg atgagttact tgactgcgaa 480
cctgcttggt gggcagacga agcgtatgaa atcgcggagg ctccgcaggg ctctgtccca 540
gaggcggctg agggcgctcat cgccgggagg ccagtcggtt gtaacagctg ggaggcgatc 600
atctgggatt acttttacta tgccgatgaa gtaccaccag tggactggcc taaaaagcac 660
atagagtcct acaggctcgc atgcacctca ctcggggagg aaaagggtga ggtcttgctg 720
gccgctttca ggtcgcgata tgcggcctaa 750
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<210> 1349

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1349

cagccgacca atgagtatct tgcc 24

<210> 1350

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1350

taatcagggc agttgagact ccta 24

<210> 1351

<211> 531

<212> DNA

<213> Pseudomonas aeruginosa strain Stone 130

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<400> 1351
atgttatgga gcagcaacga tgttacgcag cagggcagtc gccctaaaac aaagttaggt 60
ggctcaatga gcatcattgc aaccgtcaag atcggccctg acgaaatttc agccatgagg 120
gctgtgctcg atctcttcgg caaagagttt gaggacattc caacctactc tgatcgccag 180
ccgaccaatg agtatcttgc caatcttctg cacagcgaga cgttcatcgc gctcgctgct 240
tttgaccgcg gaacagcaat aggtgggctc gccgcctacg ttctacccaa gttcgagcaa 300
gcgcgaagcg agatctacat ttatgacttg gcagtcgctt ccagccatcg aaggctagga 360
gtcgcaactg ccctgattag ccacctgaag cgtgtggcgg ttgaacttgg cgcgatatgta 420
atctatgtgc aagcagacta cggtgacgat ccggcagtcg ctctctacac aaagcttggg 480
gttcgggaag acgtcatgca cttcgacatt gatccaagaa ccgccaccta a 531
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<210> 1352

<211> 22

<212> DNA

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1352
ccacgctgac agagccgcac cg 22

<210> 1353
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1353
ggccagctcc catcggaccc tg 22

<210> 1354
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1354
cacgctgaca gagccgcacc g 21

<210> 1355
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1355
atgccgttgc tgtcgaaatc ctcg 24

<210> 1356
<211> 810
<212> DNA
<213> *Serratia marcescens*

<400> 1356
atgaacacga tcgaatcgat cacggcggac ctgcacggac tgggcgtccg gcccggcgcac 60
ctgatcatgg tccatgcata gctgaaagcc gtcggcccgg tcgagggagg tgcggcctcg 120
gtggtgtcgg cccttcgcgc cgcggtcggg tccgcaggga ccctgatggg ttatgcctca 180
tgggaccgct cgccctatga ggagacgctg aacggcgcgc ggatggacga agaactgcgc 240
cgccggtggc cacccttcga tctggccaca tccggtacct atcccggctt cggcctgctc 300
aacgggtttc tgcttgaggc gcccgacgca cggcgacgag cgcatcccga cgcctccatg 360
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ggcgaaggct cgccgctgga gcgcttcgtc gggcatggcg gaaaggctct gcttctggga 480
gcgcgctcg actccgtcac cgtgctgcat tacgccgagg ccatcgcccc catcccgaac 540
aaacgccgag tgacctatga aatgccgatg ctgcggccgg atggcagggt ccgatgggag 600
ctggccgagg atttcgacag caacggcatt ctcgattgct tcgcggtcga tgggaagccg 660
gatgccgtcg agacgatcgc caaggcttat gtcgaactgg gccggcatcg ggaaggcatc 720
gtcgggtcgcg caccctccta tctgtttgaa gcgcaggata tcgtctcgtt cggcgtcacc 780

tatctcgaac agcatttcgg cgcgccctga

810

<210> 1357
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1357
gcccattccat ttgcctttgc

20

<210> 1358
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1358
gcgtaccaac ttgccatcct gaag

24

<210> 1359
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1359
tgcccctgcc acctcactc

19

<210> 1360
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1360
cgtaccaact tgccatcctg aaga

24

<210> 1361
<211> 786
<212> DNA
<213> Escherichia coli

<400> 1361
gtgcaatacg aatggcgaaa agccgagctc atcgggtcagc ttctcaacct tgggggttacc 60
cccggcggtg tgctgctggt ccacagctcc ttccgtagcg tccggccct cgaagatggg 120
ccacttggac tgatcgaggc cctgcgtgct gcgctgggtc cgggagggac gctcgtcatg 180
ccctcgtggt caggtctgga cgacgagccg ttcgatcctg ccacgtcgcc cgttacaccg 240
gaccttggag ttgtctctga cacattctgg cgctgccaa atgtaaagcg cagcgcccat 300

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ccatttgcct ttgcggcagc ggggccacag gcagagcaga tcattctctga tccattgccc 360
ctgccacctc actcgccctgc aagcccgggtc gcccgtgtcc atgaactcga tgggcaggta 420
cttctcctcg gcgtgggaca cgatgccaac acgacgctgc atcttgccga gttgatggca 480
aaggttccct atgggggtgcc gagacactgc accattcttc aggatggcaa gttggtacgc 540
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aaggagaaga gccttcagaa ggaagggtcca gtcggtcattg cctttgctcg gttgatccgc 660
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<210> 1362
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1362
 cgccgccatc gcccaaagct gg 22

<210> 1363
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1363
 cggcataatg gagcgcggtg actg 24

<210> 1364
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1364
 tttctcggcc acgcaggaaa aatc 24

<210> 1365
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1365
 catcctcgac gaatatgccg cg 22

<210> 1366
 <211> 900
 <212> DNA

<213> Enterobacter cloacae

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<400> 1366
atgactgata cccgcaaaaa cggcgatttg cacgaaccgg cgacggcacc cgcgacgccc 60
tggtccaaaa gcgagctggg cccgcaattg cgcgacctcg gcgtgctgctc aggcgatatg 120
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gcgatcgggc cggatgcggc gtggctgggt gcgcgcacg agatggggcg cgcttatggc 480
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cgccgcgtca cttattcgat gcccttactg cgcgaaggca agcgcgtctg gggtaccacg 660
tccgactggg attcgaacgg catcctcgac gaatatgccg cgcccgcacg ccccgacgcy 720
gtcgaacgga tcgcccgcga ctatctcgcc cgcaccaggg ttgcgcaagg cccggtcggc 780
ggcgcgcaat cccggctgat cgacgcggcc gatatcgttt ccttcggcat cgaatggctc 840
gaggcgcgcc acgccgcgcc agcggcgcca gcgctgaagg cgaaacaacg ccgcgactga 900

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<210> 1367

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

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<400> 1367
caaataact aacagaagcg ttca 24

```

<210> 1368

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

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<400> 1368
aggatcttgc caataccttt at 22

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<210> 1369

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

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<400> 1369
aaacctttgt ttcggctctgc taat 24

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<210> 1370

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:

Oligonucleotide

<400> 1370
aagcgattcc aataatacct tgct 24

<210> 1371
<211> 558
<212> DNA
<213> Citrobacter diversus

<400> 1371
atgaattatc aaattgtgaa tattgcggaa tgcagcaatt atcagttaga agcagcaaat 60
atactaacag aagcgttcaa tgatcttggt aacaattcat ggccagatat gacgagtgca 120
acaaaagaag taaaagaatg tattgagagt ccaaaccctt gtttcggtct gctaataaat 180
aactccttag ttggctggat aggcttaagg ccaatgtaca aggaaacctg ggaattgcat 240
ccattgggttg tcagaccaga ttatcaaaat aaagggtatt gcaagatcct gcttaaggaa 300
ttagaaaaca gagctagaga gcaagggtatt attggaatcg ctttaggaac agatgatgaa 360
tactatagaa caagtctctc ttttaataact ataacagaag ataatatatt tgattcaata 420
aaaaatatatta aaaatattaa taaacatcca tatgagtttt atcagaagaa tgggttattat 480
attggttgaa taattccaaa tgccaatggt aaaaacaaac cagatatattg gatgtggaaa 540
agtttaataca aagagtaa 558

<210> 1372
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1372
gctttcgttg cctttgccga ggtc 24

<210> 1373
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1373
caccctgtt gcttcgccca ctc 23

<210> 1374
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1374
agatattggc ttcgccgcac caca 24

<210> 1375
<211> 23
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1375

ccctgttgct tcgcccactc ctg

23

<210> 1376

<211> 441

<212> DNA

<213> *Serratia marcescens*

<400> 1376

atgatcg	tca	tctg	cgacca	cgacaac	cctc	gacgc	cctggc	tggcg	ctgcg	caccg	cgctg	60	
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caccac	accg	cg	tttat	ggc	gcg	ggggctg	gacgg	cgctt	tcg	ttgcctt	tgccg	agg	180
gcg	ctgcg	ct	acg	attac	gt	caacg	gctgc	gaatc	g	ctcgc	cggtg	gcg	240
att	tata	ccg	ccga	acgcgc	ccg	ccg	ccag	ggctg	ggccg	cg	gcctgat	cg	300
cagg	agt	ggg	cga	agca	aca	ggg	gtgcagc	gag	ctggc	gt	cg	gataccga	360
ct	ggact	ccc	ag	cg	cctgca	tcg	ggcgctg	gg	ctttg	ccg	aaacg	gagcg	420
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<210> 1377

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1377

gccgtggggtc gatgtttgat gtta

24

<210> 1378

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1378

gctcgatgac gccaaactacc tctg

24

<210> 1379

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1379

agcagcaacg atgttacgca gcag

24

<210> 1380

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1380
cgctcgatga cgccaactac ctct 24

<210> 1381
<211> 972
<212> DNA
<213> Escherichia coli

<400> 1381
gtggtaacgg cgcagtgggcgt gttttcatgg cttcttggtta tgacatgttt ttttggggta 60
cagtctatgc ctcgggcatc caagcagcaa gcgcgttacg ccgtgggtcg atgtttgatg 120
ttatggagca gcaacgatgt tacgcagcag ggcagtcgcc ctaaaacaaa gttaaaccatc 180
atgaggggaag cgggtgatcgc cgaagtatcg actcaactat cagaggtagt tggcgtcac 240
gagcgccatc tcgaaccgac gttgctggcc gtacatttgt acggctccgc agtggatggc 300
ggcctgaagc cacacagtga tattgatttg ctggttacgg tgaccgtaag gcttgatgaa 360
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gagattctcc gcgctgtaga agtcaccatt gttgtgcacg acgacatcat tccgtggcgt 480
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atcttcgagc cagccacgat cgacattgat ctggctatct tgctgacaaa agcaagagaa 600
catagcgttg ccttggtagg tccagcggcg gaggaactct ttgatccggg tcctgaacag 660
gatctatttg aggcgctaaa tgaaacctta acgctatgga actcgccgcc cgactgggct 720
ggcgatgagc gaaatgtagt gcttacgttg tcccgcattt ggtacagcgc agtaaccggc 780
aaaatcgcg cgaaggatgt cgctgccgac tgggcaatgg agcgcccgcc ggcccagtat 840
cagccgtca tacttgaagc tagacaggct tatcttggac aagaagaaga tcgcttggcc 900
tcgcgcgcag atcagttgga agaatttgtc cactacgtga aaggcgagat caccaaggta 960
gtcggcaaat aa 972

<210> 1382
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1382
tagatatgat aggcggtaaa aagc 24

<210> 1383
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1383
cccaaattcg agtaagaggt att 23

<210> 1384
<211> 22
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1384

gatatgatag gcggtaaaaa gc

22

<210> 1385

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1385

tcccaaattc gagtaagagg ta

22

<210> 1386

<211> 477

<212> DNA

<213> Staphylococcus aureus

<400> 1386

atgaaagaaa	gatatggaac	agtatataaa	ggctctcaga	ggctcataga	cgaggaaaagt	60
ggagaagtaa	tagaggtaga	taagctatac	cgtaaacaaa	cgtctggtaa	ctttgtaaaa	120
gcgtatatcg	tccaattaat	aagtatgtta	gatatgatag	gcggtaaaaa	gctcaagatt	180
gttaattata	tattagataa	tgtacatcta	agtaataaca	caatgatagc	aactgttaga	240
gaaatagcag	aaggaacaaa	tacaagcacg	aaaaccgtaa	atacaacgct	taaaatctta	300
gaagaaggaa	atatcattaa	aagaagaact	ggagcattaa	tgctaaaccc	agagctactc	360
atgagaggcg	atgacaaaaa	acaaaaatac	ctcttactcg	aatttgggaa	ctttgagcaa	420
gaggacgacc	aaaagcaaga	aaatgcttta	tcagaatatt	attctttcaa	ggagtag	477

<210> 1387

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1387

ttatgcctct tccgaccatc aagc

24

<210> 1388

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1388

tacgctcgtc atcaaaatca ctcg

24

<210> 1389

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1389
gaataacggt ttggttgatg cgag 24

<210> 1390
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1390
atggcaagat cctggtatcg gtct 24

<210> 1391
<211> 816
<212> DNA
<213> Escherichia coli

<400> 1391
atgagccata ttcaacggga aacgtcttgc tcgaggccgc gattaaattc caacatggat 60
gctgatttat atgggtataa atgggctcgc gataatgtcg ggcaatcagg tgcgacaatc 120
tatcgattgt atgggaagcc cgatgcgcca gagttgtttc tgaaacatgg caaaggtagc 180
gttgccaatg atgttacaga tgagatggtc agactaaact ggctgacgga atttatgcct 240
cttccgacca tcaagcattt tatccgtact cctgatgatg catggttact caccactgcg 300
atccccggga aaacagcatt ccaggtatta gaagaatata ctgattcagg tgaaaatatt 360
gttgatgcgc tggcagtgtt cctgcgcgag ttgcattcga ttctgtttg taattgtcct 420
tttaacagcg atcgcgattt tctgtctcgt caggcgcaat cacgaatgaa taacggtttg 480
gttgatgcga gtgattttga tgacgagcgt aatggctggc ctggtgaaca agtctggaaa 540
gaaatgcata agctttttgcc attctcaccg gattcagtcg tcaactcatg tgattttctca 600
cttgataacc ttattttttga cgaggggaaa ttaataggtt gtattgatgt tggacgagtc 660
ggaatcgcag accgatacca ggatcttgcc atcctatgga actgcctcgg tgagttttct 720
ccttcattac agaaacggct ttttcaaaaa tatggtattg ataatcctga tatgaataaa 780
ttgcagtttc atttgatgct cgatgagttt ttctaa 816

<210> 1392
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1392
tgggtggaga ggctattcgg ctat 24

<210> 1393
<211> 23
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1393
cagtccttc ccgcttcagt gac 23

<210> 1394
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1394
gacgttgatca ctgaagcggg aagg 24

<210> 1395
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1395
cttggtgggc gaatgggcag gtag 24

<210> 1396
<211> 795
<212> DNA
<213> Escherichia coli

<400> 1396
atgattgaac aagatggatt gcaagcaggt tctccggccg cttgggtgga gaggetattc 60
ggctatgact gggcacaaca gacaatcggc tgctctgatg ccgccgtgtt ccggctgtca 120
gcgcaggggc gcccggttct ttttgtcaag accgacctgt ccggtgccct gaatgaactg 180
caggacgagg cagcgcggct atcgtggctg gccacgacgg gcgttccttg cgcagctgtg 240
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gatctcctgt catctcacct tgctcctgcc gagaaagtat ccatcatggc tgatgcaatg 360
cggcggctgc atacgcttga tccggctacc tgcccatcgc accaccaagc gaaacatcgc 420
atcgagcgag cagctactcg gatggaagcc ggtcttgctg atcaggatga tctggacgaa 480
gagcatcagg ggctcgcgcc agccgaactg ttcgccaggc tcaaggcgcg catgcccagc 540
ggcgaggatc tcgtcgtgac ccatggcgat gcctgcttgc cgaatatcat ggtggaaaat 600
ggccgctttt ctggattcat cgactgtggc cggtgggtg tggcggaccg ctatcaggac 660
atagcgttgg ctaccgtga tattgctgaa gagcttggcg gcgaatgggc tgaccgcttc 720
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gacgagttct tctga 795

<210> 1397
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1397
gtgggagaaa atgaaaacct at 22

<210> 1398
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1398
atggagtgaag agagcctgat 20

<210> 1399
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1399
acctatgatg tgggaacggga aaag 24

<210> 1400
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1400
cgatggagtg aaagagcctg atg 23

<210> 1401
<211> 795
<212> DNA
<213> Enterococcus faecalis

<400> 1401
atggcctaaaa tgagaatatt accggaattg aaaaaactga tcgaaaaata ccgctgcgta 60
aaagatacgg aaggaatgtc tcctgctaag gtatataagc tgggtgggaga aaatgaaaac 120
ctatatattaa aaatgacgga cagccgggtat aaagggacca cctatgatgt ggaacgggaa 180
aaggacatga tgctatggct ggaaggaaaag ctgcctgttc caaaggctct gcactttgaa 240
cgccatgatg gctggagcaa tctgctcatg agtgaggccg atggcgctct ttgctcggaa 300
gagtatgaag atgaacaaag ccctgaaaag attatcgagc tgtatgcgga gtgcatcagg 360
ctctttcact ccatcgacat atcggattgt ccctatacga atagcttaga cagccgctta 420
gccgaattgg attacttact gaataacgat ctggccgatg tggattgcga aaactgggaa 480
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gaagaggaac ttgtcttttc ccacggcgac ctgggagaca gcaacatctt tgtgaaagat 600
ggcaaagtaa gtggctttat tgatcttggg agaagcggca gggcggacaa gtggtatgac 660
attgccttct gcgtccgggt gatcagggag gatatcgggg aagaacagta tgtcgagcta 720
ttttttgact tactggggat caagcctgat tgggagaaaa taaaatatta tattttactg 780
gatgaattgt tttag 795

<210> 1402
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1402
tattcaacaa tttatcggaa acag 24

<210> 1403
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1403
tcagagagcc aactcaacat ttt 23

<210> 1404
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1404
aaacagcgtt ttagagccaa ataa 24

<210> 1405
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1405
ttctcagaga gccaaactcaa catt 24

<210> 1406
<211> 780
<212> DNA
<213> Acinetobacter baumannii strain BM2580

<400> 1406
atggaattgc ccaatattat tcaacaattt atcggaaaca gcgtttttaga gccaaataaa 60
attggtcagt cgccatcgga tgtttattct tttaatcgaa ataatgaaac tttttttctt 120
aagcgatcta gcactttata tacagagacc acatacagtg tctctcgtga agcgaaaaatg 180
ttgagttggc tctctgagaa attaaagggtg cctgaactca tcatgacttt tcaggatgag 240
cagtttgaat tcatgatcac taaagcgcac aatgcaaaac caatttcagc gcttttttta 300
acagaccaag aattgcttgc tatctataag gaggcactca atctgttaaa ttcaattgct 360
attattgatt gtccatttat ttcaaacatt gatcatcggt taaaagagtc aaaatttttt 420
attgataacc aactccttga cgatatagat caagatgatt ttgacactga attatgggga 480
gaccataaaa cttacctaag tctatggaat gagttaaccg agactcgtgt tgaagaaaga 540
ttgggttttt ctcatggcga tatcacggat agtaatat ttatagataa attcaatgaa 600
atttttttt tagatcttgg tcgtgctggg ttagcagatg aattttgtaga tatatccttt 660
gttgaacgtt gcctaagaga ggatgcatcg gaggaactg cgaaaatatt tttaaagcat 720
ttaaaaaatg atagacctga caaaaggaat tattttttta aacttgatga attgaattga 780

<210> 1407
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1407
ccctgtaata gaaaagcaag tagg 24

<210> 1408
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1408
ttgtcgtatc cctcaaata cc 22

<210> 1409
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1409
tgggattaca atggcaatca gcg 23

<210> 1410
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1410
ggggaatagg tcacaagatc tgctt 25

<210> 1411
<211> 912
<212> DNA
<213> Pseudomonas aeruginosa

<400> 1411
atgcttttat ataaaatgtg tgacaatcaa aattatgggg ttacttacat gaagttttta 60
ttggcatttt cgcttttaaat accatccgtg gtttttgcaa gtagttcaaa gtttcagcaa 120
gttgaacaag acgttaaggc aattgaagtt tctctttctg ctcgtatagg tgtttccggt 180
cttgatactc aaaatggaga atattgggat tacaatggca atcagcgctt cccgttaaca 240
agtactttta aaacaatagc ttgcgctaaa ttactatatg atgctgagca aggaaaaagt 300
aatcccaata gtacagtcga gattaagaaa gcagatcttg tgacctattc ccctgtaata 360
gaaaagcaag tagggcaggc aatcacactc gatgatgcgt gcttcgcaac tatgactaca 420

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agtgataata ctgcggcaaa tatcatccta agtgctgtag gtggccccc aaaggcgttact 480
gatttttttaa gacaaattgg ggacaaagag actcgtctag accgtattga gcctgattta 540
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aacattgcgg atcgtcagg tgctggcgga tttggtgctc ggagtattac agcagttgtg 780
tggagtgagc atcaagcccc aattattgtg agcatctatc tagctcaaac acaggcttca 840
atggcagagc gaaatgatgc gattgttaaa attggtcatt caatttttga cgtttataca 900
tcacagtcgc gc 912

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<210> 1412
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1412
 gagaaaacgc tccagcaggg c 21

<210> 1413
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1413
 catgaggctt tcaactgcggg g 21

<210> 1414
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1414
 tatcgттаат cgcaccatca c 21

<210> 1415
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 Oligonucleotide

<400> 1415
 atgcagtaat gcggctttat c 21

<210> 1416
 <211> 1146
 <212> DNA

<213> *Klebsiella pneumoniae* strain HEL-1

<400> 1416

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atgatgaaaa aatcggttatg ctgcgctctg ctgctgacag cctctttctc cacatttgct 60
gccgcaaaaa cagaacaaca gattgccgat atcgttaatc gcaccatcac cccgttgatg 120
caggagcagg ctattccggg tatggccgtt gccgttatct accagggaaa accctattat 180
ttcacctggg gtaaagccga tatcgccaat aaccacccag tcacgcagca aacgctgttt 240
gagctaggat cggtttagtaa gacgtttaac ggcgtggttg gcggcgatgc tatcgcccgc 300
ggcgaaatta agctcagcga tccggtcacg aaatactggc cagaactgac aggcaaacag 360
tggcagggta tccgcctgct gcacttagcc acctatacgg caggcggcct accgctgcag 420
atccccgatg acgttaggga taaagccgca ttactgcatt tttatcaaaa ctggcagccg 480
caatggactc cgggcgctaa gcgactttac gctaactcca gcattggtct gtttggcgcg 540
ctggcgggtga aacctcagg aatgagttac gaagaggcaa tgaccagacg cgtcctgcaa 600
ccattaaaaac tggcgcatat ctggattacg gttccgcaga acgaacaaaa agattatgcc 660
tggggctatc gcgaaggga gcccgtacac gtttctccgg gacaacttga cgccgaagcc 720
tatggcgtga aatccagcgt tattgatatg gcccgtgagg ttcaggccaa catggatgcc 780
agccacgttc aggagaaaac gtcacagcag ggcattgcgc ttgcgcagtc tcgctactgg 840
cgtattggcg atatgtacca gggattaggc tgggagatgc tgaactggcc gctgaaagct 900
gattcgatca tcaacggcag cgacagcaaa gtggcattgg cagcgcttcc cgccgttgag 960
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ggatttggca gctacgtagc cttcgttcca gaaaaaaccc ttggcatcgt gatgctggca 1080
aacaaaagct atcctaacc tgtccgtgtc gaggcggcct ggcgcattct tgaaaagctg 1140
caataa
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<210> 1417

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1417

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tggttaacta yaatccsatt gcgga 25
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<210> 1418

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1418

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atgctttacc cagcgtcaga tt 22
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<210> 1419

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1419

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cgatgaataa gctgatttct cacg 24
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<210> 1420

<211> 24

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1420
tgctttaccc agcgtcagat tacg 24

<210> 1421
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1421
aattagagcg gcagtcggga ggaa 24

<210> 1422
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1422
gaaatcagct tattcatcgc cacg 24

<210> 1423
<211> 876
<212> DNA
<213> Escherichia coli strain GRI-1

<400> 1423
atgggttaaaa aatcactgcg tcagttcacg ctgatggcga cggcaaccgt cacgctgttg 60
ttaggaagtg tgccgctgta tgcgcaaacg gcggacgtac agcaaaaact tgccgaatta 120
gagcggcagt cgggaggaag actgggtgtg gcattgatta acacagcaga taattcgcaa 180
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tcaactggctg agcttagcgc ggccgcgcta cagtacagcg ataactgtggc gatgaataag 420
ctgatttctc acgttggcgg cccggctagc gtcaccgcgt tcgcccgaca gctgggagac 480
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cgtgatacca cttcacctcg ggcaatggcg caaactctgc gtaatctgac gctgggtaaa 600
gcattgggtg acagccaacg ggcgagctg gtgacatgga tgaaaggcaa taccaccggt 660
gcagcgagca ttcaggctgg actgcctgct tcctgggttg tgggggataa aaccggcagc 720
ggtgactatg gcaccaccaa cgatatcgcg gtgatctggc caaaagatcg tgcgccgctg 780
attctggtca cttacttcac ccagcctcaa cctaaggcag aaagccgtcg cgatgtatta 840
gcgtcggcgg ctaaaatcgt caccaacggt ttgtaa 876

<210> 1424
<211> 23
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1424
gttaacggtg atggcgacgc tac 23

<210> 1425
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1425
gaattatcgg cgggtgtaat cagc 24

<210> 1426
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1426
cacgctcaat accgccattc ca 22

<210> 1427
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1427
ttatcgccca ctacccatga ttcc 24

<210> 1428
<211> 876
<212> DNA
<213> Salmonella typhimurium strain CAS-5

<400> 1428
atgatgactc agagcattcg ccgctcaatg ttaacggtga tggcgacgct acccctgcta 60
ttagcagcg caacgctgca tgcgcaggcg aacagcgtgc aacagcagct ggaagccctg 120
gagaaaagtt cgggaggtcg gcttggcggt gcgctgatta acaccgccga taattcgag 180
attctctacc gtgccgatga acgttttgcg attgtcgagta ccagtaagggt gatggcggcc 240
gcggcggtgc ttaaacagag cgagagcgat aagcacctgc taaatcagcg cgttgaaatc 300
aagaagagcg acctgggttaa ctacaatccc attgctggaga aacacgttaa cggcacgatg 360
acgctggctg agcttggcgc agcggcgctg cagtatagcg acaatactgc catgaataag 420
ctgattgccc atctgggtgg tcccgataaa gtgacggcgt ttgctcgctc gttgggtgat 480
gagaccttcc gtctggacag aaccgagccc acgctcaata ccgccattcc aggcgaccgc 540
cgtgatacca ccacgccgct cgcgatggcg cagaccctga aaaatctgac gctgggtaaa 600
gcgctggcgg aaactcagcg ggcacagttg gtgacgtggc ttaagggcaa tactaccggt 660
agcgcgagca ttctgggcggg tctgccgaaa tcatgggtag tgggcgataa aaccggcagc 720
ggagattatg gcaccaccaa cgatatcgcg gttatctggc cggaaaacca cgcaccgctg 780
gttctggtga cctactttac ccaaccggag cagaaggcgg aaagccgctc ggatattctg 840

gctgcggcgg cgaaaatcgt aaccacgggt ttctga 876

<210> 1429
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1429
tttacggcta aagatactga aaagt 25

<210> 1430
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1430
gtttaataaa acaaccaccg aataat 26

<210> 1431
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1431
taattgacac tccatttacg gctaa 25

<210> 1432
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide

<400> 1432
accgaataat attttccttt caggca 26

<210> 1433
<211> 741
<212> DNA
<213> Pseudomonas aeruginosa

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